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FIELD MANUAL

COMBAT SERVICE SUPPORT

HEADQUARTERS, DEPARTMENT OF THE ARMY

MARCH 1973

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PREFACE

1. This manual discusses the organization, responsibilities, and concept of operation for combat service support of the Army in the field. It incorporates the approved doctrine contained in the review of "The Administrative Support, Theater Army, 1965-1970," the conceptual tenets of "Major Command Echelons," and programs contained in the "Logistic Master Plan."

2. Due to new or revised doctrine and the publication of related field manuals the following changes have been made:

a. The subjects—rear area protection, base development, communications, and civil affairs—have been abbreviated.

b. Chapter 2, "Operational Environment," has been added to emphasize and consolidate this important consideration, and incorporate tactical nuclear doctrine.

c. Chapter 12, "Processing and Shipping Retrograde Materiel," has been added to document the doctrine developed in Vietnam.

d. Chapter 17, "Army Medical Support," has been completely rewritten by the Medical Service Agency.

e. Appendix B, "Abbreviation Index," was added to facilitate the use and understanding of common abbreviations used in this manual.

f. The materiel command has replaced the supply and maintenance command and the following related changes have been incorporated: Assistant Chief of Staff, Materiel replaces the Assistant Chief of Staff, Maintenance and the Assistant Chief of Staff, Supply; the materiel management center replaces the inventory control center (except medical), the stock control center and the maintenance management detachment; and a logistic readiness office has been established at all levels of command.

g. The area support command has been redesignated the theater army area command.

h. The real property maintenance activities have been transferred to the engineer command.

i. The US Army Strategic Communications Command (Theater) has been changed to the Theater Army Communications Command which is a subordinate unit of the US Army Strategic Communications Command in CONUS.

3. A transition period for the full implementation of automatic data processing systems and the development of supporting tables of organization and equipment will be required.



FIELD MANUAL

No. 100-10

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 30 March 1973

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PART ONE

GENERAL

CHAPTER 1

INTRODUCTION

1-1. Purpose and Scope

a. This manual prescribes doctrine for use by commanders and staff officers at division and higher levels in providing combat service support (CSS) to the Army in the field. It specifically addresses combat service support at theater army

support command, field army support command, and corps support command levels.

b. The following standardization agreements (STANAG) which are identified by type of agreement and number at the beginning of each appropriate chapter are supported by the doctrine contained in this manual:

<i>Title</i>	<i>NATO STANAG</i>	<i>CENTO STANAG</i>	<i>SEATO SEASTAG</i>	<i>ABCA SOLOG</i>
Interrogation of Prisoners of War (PW) -----	2033	2033	2033	69
Ammunition Supply Procedure -----	2034	----	2034	--
Principles and Procedures for Establishing Communications ----	2043	2043	2043	--
Procedures for Dealing with Prisoners of War (PW) -----	2044	2044	2044	--
Civil Affairs/Military Government Principles of Operations ----	2055	2055	2055	--
Straggler Control -----	2067	2067	2067	--
Emergency War Burial Procedures -----	2070	2070	----	--
Rear Area Security and Rear Area Damage Control -----	2079	2079	2079	--
Handling and Reporting of Captured Enemy Equipment and Documents -----	2084	2084	2084	--
Nuclear Biological and Chemical Defense Procedures -----	2119	----	----	--
Employment of Nuclear Weapons in the Land/Air Battle -----	2120	----	----	--
Vulnerability Assessment of Chemical and Biological Hazards ----	2133	2133	----	--
Logistics Assistance -----	2135	----	----	--

1-2. Application

a. The material in this manual is applicable to—

(1) General war, to include consideration of the employment of and protection from nuclear and chemical weapons and protection from biological weapons; and operations in nuclear, chemical, or biological environments.

(2) Limited war, to include tactical nuclear warfare.

(3) Cold war, to include stability operations.

b. Combat service support systems are being developed to implement fully the doctrine presented in this and other supporting manuals.

Accordingly, for those tasks described in the manual to be performed by automatic data processing equipment (ADPE), a transition period will exist during which current methods will be replaced as equipment becomes available.

1-3. Explanation of Terms

Definitions and abbreviations used in this manual are in consonance with those contained in JCS Pub 1, AR 310-25, and AR 310-50. New terms and abbreviations have been established by published doctrine. The three major subdivisions of military activity are combat, combat support (CS), and combat service support (CSS). The distinction between combat support and combat serv-

ice support must be made in order to understand this manual properly, although a branch of the Army may have both CS and CSS roles. The definitions are:

a. Combat Support—Operational assistance furnished combat elements by other designated units.

b. Combat Service Support—The assistance provided operating forces primarily in the fields of administrative services, chaplain services, civil affairs, finance, legal service, health services, military police, supply, maintenance, transportation, construction, troop construction, acquisition and disposal of real property, facilities engineering, topographic and geodetic engineering functions, food service, graves registration, laundry, dry cleaning, bath, property disposal and other logistic services.

1-4. Recommended Changes

Users of this publication are encouraged to submit recommended changes and comments to improve the publication. Comments should be keyed to the specific page, paragraph, and line of the text in which the change is recommended. Reasons will be provided for each comment to insure understanding and complete evaluation. Comments should be prepared using DA Form 2028 (Recommended Changes to Publications) and forwarded direct to the Commander, US Army Combat Developments Command, Personnel and Logistics Systems Group, Fort Lee, Virginia 23801. Originators of proposed changes that would constitute a significant modification of approved Army doctrine may send an information copy, through command channels, to the Commander, US Army Combat Developments Command, Fort Belvoir, Virginia 22060, to facilitate review and followup action.

CHAPTER 2

OPERATIONAL ENVIRONMENT

(STANAG 2119, 2120, 2133)

2-1. General

Conflicts in which US forces may be employed involve a variety of situations and conditions. Proper task orientation and organization under the various operational environments encountered is essential to the successful accomplishment of the combat service support mission. In his planning and execution, the commander must always consider the implication of these factors:

- a. General war remains a constant threat.
- b. Cold and limited war situations can occur anywhere in the world.
- c. Forces can conduct stability operations (the military portion of the overall program of internal defense and internal development) in any strategically significant area where insurgency has developed or is a threat (FM 31-23).
- d. Chemical, biological, or nuclear weapons may be employed by the enemy, and nuclear and chemical weapons may be used by friendly forces.
- e. Terrain, climate, weather, and social and economic conditions differ greatly among the possible areas of conflict.
- f. Formal agreements with host countries on the status of forces may inhibit the freedom of military action. Similar inhibitions may arise from foreign policy considerations and from international law.

2-2. Nuclear and CBR Defensive Measures

a. Nuclear and chemical, biological, and radiological (CBR) defensive measures require emphasis on the protection of facilities and installations, and on flexibility and mobility in the combat service support system. Large CSS installations are profitable targets for nuclear attack. The concentration of personnel necessary to operate such in-

stallations also invites enemy chemical or biological attack. Proper planning and execution of the plans reduce the effects of such attacks. To provide continuing and effective support, the combat service support system must be flexible in terms of communications, transportation, and an adequate number of properly located and dispersed installations. The planner emphasizes the maintenance of the flow of supplies and personnel replacements rather than the buildup of stocks by using a support system organized to perform throughput distribution on a routine basis. It is necessary, however, to stock essential supplies near points of anticipated consumption to permit continued operations when lines of communication (LOC) are disrupted.

b. Alternate channels should exist for each type of support. Plans should provide for reestablishing the original channel, when interrupted, or for rapidly diverting support into alternate channels. Support means of any one type should not be concentrated, but widely dispersed as the mission and rear area protection permit.

c. Plans for the use of an area for a combat service support installation should include a vulnerability analysis. Camouflage and dummy positions reduce the probability of nuclear attack on actual installations. Measures to reduce the effects of hostile attacks include properly arranging stored materiel; attaining maximum dispersion consistent with control; taking advantage of terrain features; using barricades, revetments, and underground shelters for protection; and thoroughly planning and executing area damage control.

d. It is necessary to disperse; protect; and, where possible, duplicate all facilities to the degree that the situation requires and the resources and mission permit. Factors considered include—

- (1) The yield of the nuclear weapons, and the

type and number of chemical, biological, and nuclear weapons systems the enemy is capable of using.

(2) The nature of terrain, to include natural and manmade facilities such as mines, caves, and tunnels.

(3) The numbers and types of service units available, the transportation net, and the availability of local civilian labor and other civilian resources.

(4) The reduced efficiency and increased vulnerability to sabotage and pilferage resulting from dispersed CSS operations.

(5) The calculated risk the command can accept.

(6) The disposition of other troops in the area.

(7) The tactical situation of the supported force.

(8) The degree of protection provided.

(9) The mutual support that military facilities and the civilian population and agencies can provide.

(10) The capabilities of the signal communications system.

(11) The degree of guerrilla activity and sabotage anticipated.

2-3. Enemy Employment of Chemical, Biological, or Nuclear Weapons

Preventive and corrective measures required to counter the effects of enemy employment of chemical, biological, or nuclear weapons are mentioned below under the functional area to which each applies.

a. Supply. Reducing the vulnerability of supply operations requires dispersion, cover, and the use of mobile supply points. Supplies suspected of exposure to contamination require detailed inspection, testing, and if necessary, decontamination prior to use or issue. Class I supplies and water sources suspected of CBR contamination demand special attention. There is an increase in requirements for the replacement of supplies of any class that have been contaminated by enemy chemical, biological, or nuclear munitions beyond the limits of reclamation. There is also an increase in requirements for replacement items because of the delay inherent in decontamination. There is an increased need for decontamination equipment

and supplies, individual protective clothing, impregnation equipment and supplies, and other individual and unit protective equipment.

b. Maintenance. A CBR environment will increase the requirement for covered shop space. More time is necessary for repair of equipment that has been contaminated and must be decontaminated prior to repair. Using units are responsible for decontaminating equipment, to the greatest extent practicable with authorized equipment and procedures, before it is turned in for maintenance. The receiving maintenance unit also checks for contamination. Separate storage sites within maintenance areas may be necessary for the storage and decontamination of equipment prior to maintenance. Disposition of contaminated waste also may present a problem.

c. Transportation. Alternate supply routes are of increased importance. Traffic regulation and control measures are necessary to prevent the use of contaminated routes. Detours and rerouting normally extend the turnaround time of transportation conveyances and reduce the gross movement capability. Ports and beaches are also vulnerable to contamination by enemy CBR weapons.

d. Construction. Protective features are essential in key headquarters, communications and automatic data processing (ADP) facilities, and combat service support installations. Rehabilitation of damaged facilities is much more difficult and time consuming when these facilities also are contaminated. Rehabilitation forces do not normally undertake restoration unless the area affected is of vital importance and the damaged facilities cannot be established elsewhere with less effort.

e. Medical Support. There may be a sharp increase in the number of persons needing medical care, particularly in rear areas. Therefore, plans must be made to handle this increase, since it will generate a great disparity between medical resources and workload. In such circumstances, the Army Medical Department requires assistance in labor, transportation, utilities, and the CBR decontamination of patients and facilities.

f. Labor. Civilian and prisoner of war (PW) labor forces work less effectively in contaminated areas. Individuals who must wear protective masks and equipment work less efficiently, and there are increased requirements for personnel to perform decontamination tasks. Civilian laborers are reluctant to work in areas that are contami-

nated or remain potential enemy targets. The rules of the Geneva Conventions prohibit using PW labor in contaminated areas unless the prisoners volunteer.

g. Personnel Services. Enemy chemical, biological, or nuclear weapons employment increases problems in discipline, law and order, traffic control, circulation control of individuals, evacuation of PW and the security of critical installations and materiel. Contamination of areas, facilities, and traffic routes—with the resulting confusion and loss of control—imposes heavy demands for the sealing off of stricken areas, the security of critical supplies, and the collection of individuals for return to their units.

h. Civil Affairs. The CBR environment affects civil affairs (CA) operations. There is an increase in requirements for nuclear and CBR defense, rear area protection measures, and medical support for cities and towns. These requirements include provisions for shelters and protective equipment, surveys to detect and mark contaminated areas, decontamination of vital facilities, and distribution of food and medical supplies for disaster relief and the prevention of diseases. In a densely populated area, the requirements for aiding civilian casualties could be overwhelming, and this problem could affect tactical operations. The need for calming the fears of the civilian populace is an additional consideration; psychological operations (PSYOP) are conducted to support this effort. For detailed CA and PSYOP information, see FM 41-10 and FM 33-1 respectively.

2-4. Tactical Nuclear Warfare

a. A major premise associated with tactical nuclear warfare is that, should it develop with a suddenness that would eliminate any lengthy transition period from normal operations, the logistics posture must be such that only minimal changes will be required to attain a nuclear configuration. Logistics doctrine will remain unchanged, but dispersion and alternate methods of accomplishing the logistics mission will be emphasized. In order to operate from dispersed locations and to possess a reasonable degree of survivability, the combat service support units should be mobile. Although CSS units will be positioned with the forward brigades, the location of logistics units should not interfere with tactical operations. The most important CSS functions will be resupply and maintenance. Logistic airlift operations will be utilized to accomplish critical resup-

ply missions and will have an expanded role (FM 100-30).

b. The mass casualties anticipated in the early stages of tactical nuclear warfare may overload the medical system; therefore, treatment of cases involving minimum trauma may be omitted or deferred. Mass casualties will create a severe graves registration problem. Early recovery and identification of remains will be extremely difficult, if not impossible, because of radioactivity, biological or chemical contamination. Mass burials may be required if the number of casualties is usually great. Medical facilities should be established in areas away from potential nuclear targets. Medical self-help and buddy care training programs should be established as a means of reducing suffering, conserving unit effectiveness, and alleviating medical workloads. The principles and factors concerning evacuation of the wounded remain unchanged. As soon as possible after a nuclear strike on a friendly position, commitment of aircraft for evacuation missions should be given a high priority. During this phase, a priority mission for Army aircraft, particularly medium helicopters, is the movement of large numbers of patients to appropriate treatment or holding facilities.

c. The following doctrinal concepts for tactical nuclear warfare are summarized for easy reference:

- (1) The transition period from conventional to tactical nuclear operations may be extremely short.
- (2) Minimal changes in logistics posture will take place.
- (3) Logistics doctrine will remain unchanged.
- (4) The CSS units should be mobile.
- (5) Resupply and maintenance become the most important CSS functions.
- (6) Logistics airlift operations have an expanded role.
- (7) The medical and graves registration systems will be initially overloaded.
- (8) Patients will be sorted to establish priority for treatment.
- (9) Medical facilities will be established away from potential nuclear targets.
- (10) Medical self-help and buddy care training programs should be established.
- (11) Evacuation principles will remain unchanged although medium helicopters, when available, will be utilized to evacuate large numbers of patients.



CHAPTER 3

TERRITORIAL AND COMMAND ORGANIZATION

Section I. GENERAL

3-1. Initial Theater Organization

The needs of the forces assigned to an area of operations determine the organization of the theater. The term "area of operations" is prescribed for joint or combined operations, and is synonymous with the term "theater of operations." The general plans for the theater normally prescribe the initial organization.

3-2. Subsequent Theater Organization

Subsequent organization is a responsibility of the unified command commander (theater commander) and is based on theater requirements and experience. Monetary constraints and troop ceilings will also impact upon theater organization.

Section II. TERRITORIAL ORGANIZATION

3-3. General

a. That portion of a theater of operations required for ground force operations normally is divided into combat zone and a communications zone (COMMZ) (fig. 3-1). The theater commander designates the rear boundary of the combat zone. The combat zone contains the area required by combat forces for the conduct of operations and the necessary organic combat support and combat service support facilities. The COMMZ includes the lines of communication, establishments for supply and evacuation, and the area required by the agencies and facilities providing combat support and combat service support to elements in the combat zone. Initially, a theater of operations may consist of the combat zone only, with combat service support provided directly from the continental United States (CONUS) or from offshore bases.

b. Territorial organization of a theater of operations varies with the type of theater, the type of forces involved, and the nature of operations planned. Figures 3-2 through 3-4 illustrate schematically examples of various types of theaters of operations.

c. Warfare in an ocean area may prevent the distinct separation of combat and combat service support operations that is achieved in a continental theater of operations. Combat service support

establishments serving the ocean area may be dispersed throughout the theater.

3-4. Communications Zone

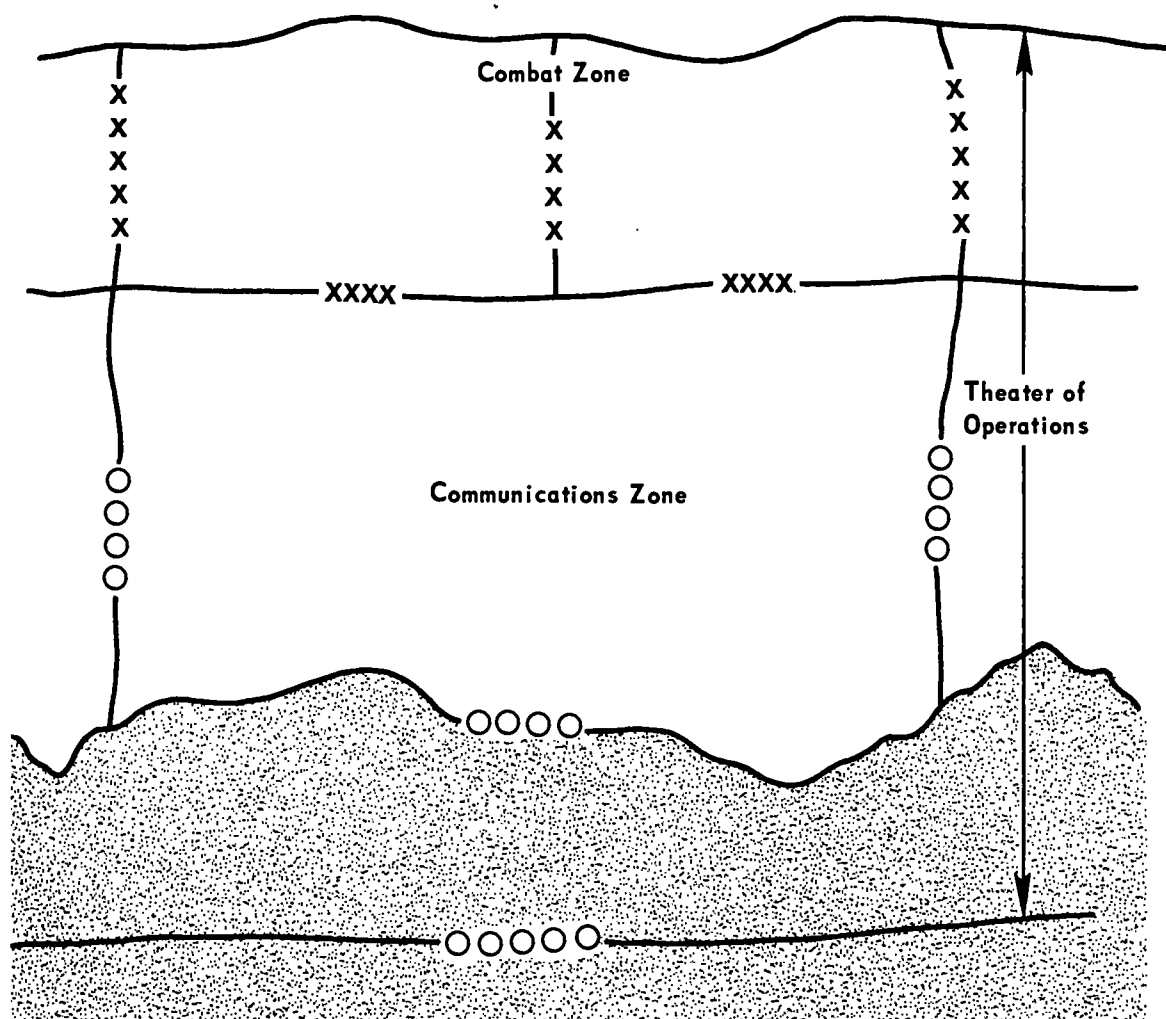
a. The situation and plans for future operations determine the manner in which the development of a COMMZ proceeds. Possible developments include—

(1) Initially establishing a division combat service support area and the subsequent growth into a COMMZ.

(2) Establishing a COMMZ with no intention of subsequent subdivision. Normally, the commander does not subdivide the COMMZ unless existing conditions make it necessary. An example of when the commander might subdivide a COMMZ is when the theater becomes extremely deep or when the geographic characteristics of the area so demand; e.g., an ocean area that includes island bases.

b. The steps generally involved in the development of the COMMZ are as follows (fig. 3-5):

(1) Initially, a division support command (DISCOM) supports a division-size force. The DISCOM is normally augmented with combat service support units which serve as a base for expansion as the force size increases. When the combat zone expands into a corps operation, the



NOTE: The field army rear boundary (XXXX) normally is also the army group rear boundary (XXXXX).

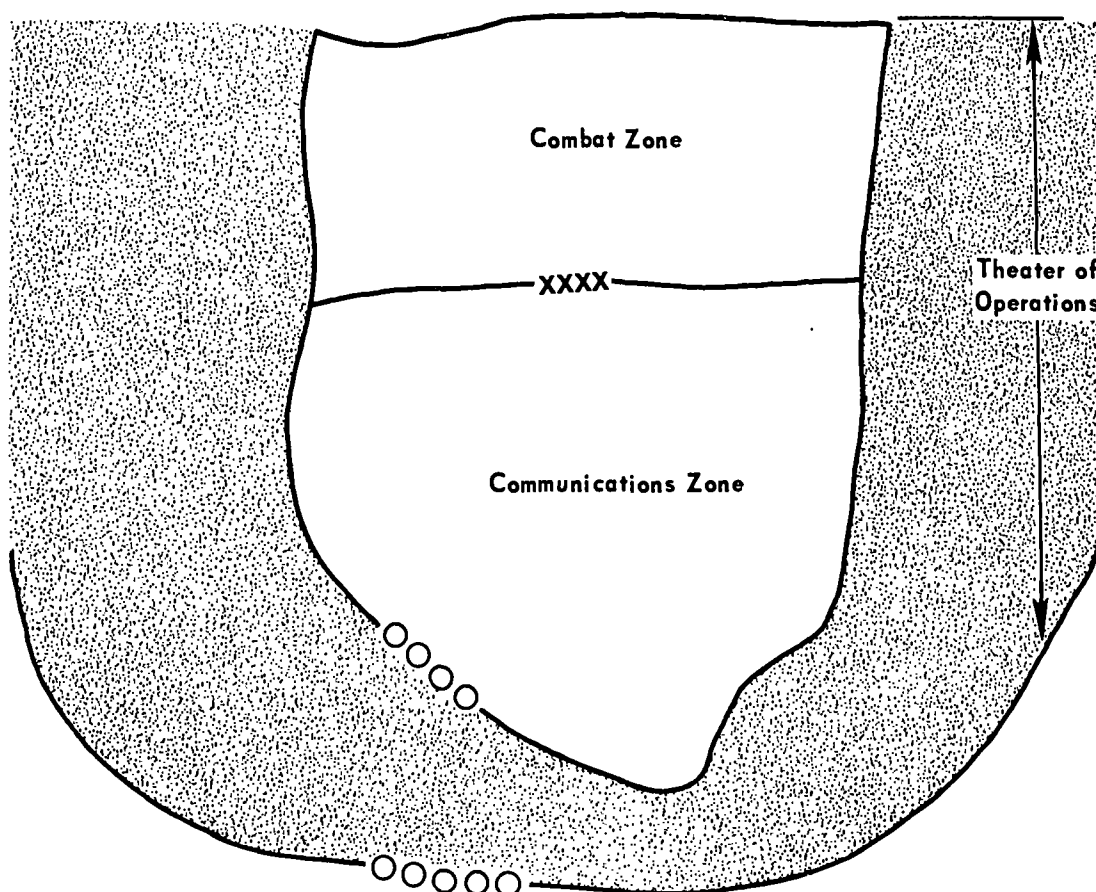
Figure 3-1. The United States portion of a theater of operations on a large landmass (schematic).

DISCOM is replaced by a corps support command (COSCOM) which provides support and commands all nondivisional combat service support units. The COSCOM is also normally augmented with additional combat service support units to support the force and serve as a base for further expansion. When the combat zone expands into a field army operation, a field army support command with necessary combat service support units controls the area in rear of the corps rear boundary and supports the force. The COMMZ comes into being when the area has grown to a size which is too large for the tactical commander to control and the theater commander designates the rear boundary of the combat zone. Responsibility for the COMMZ is normally assigned to the theater army commander who further assigns respon-

sibility for the COMMZ to the theater army support command (TASCOM) commander. Paragraph 3-12b discusses the mission of the TASCOM.

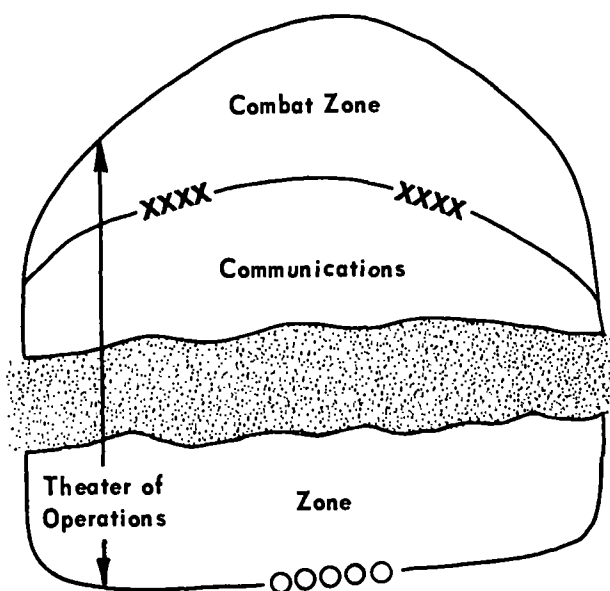
(2) As the rear boundary of the combat zone displaces forward and the depth of the COMMZ increases, the elements operating the lines of communications or executing other combat service support functions require augmentation to maintain a constant level of support (fig. 3-6).

(3) If the COMMZ has extreme depth, the TASCOM commander may subdivide it into two or more theater army area commands (TAACOM) as indicated in fig. 3-7. Figure 3-7 also shows the area support groups (ASG) which are subordinate operating units of the TAACOM



NOTE: Size of landmass limits size of force in the theater because of no room for expansion.

Figure 3-2. Theater of operations on a small landmass (island or peninsula) (schematic).



NOTE: The COMMZ rear boundary (OOOOO) coincides with the theater of operations rear boundary.

Figure 3-3. Theater of operations with the communications zone interrupted by a large expanse of water (schematic).

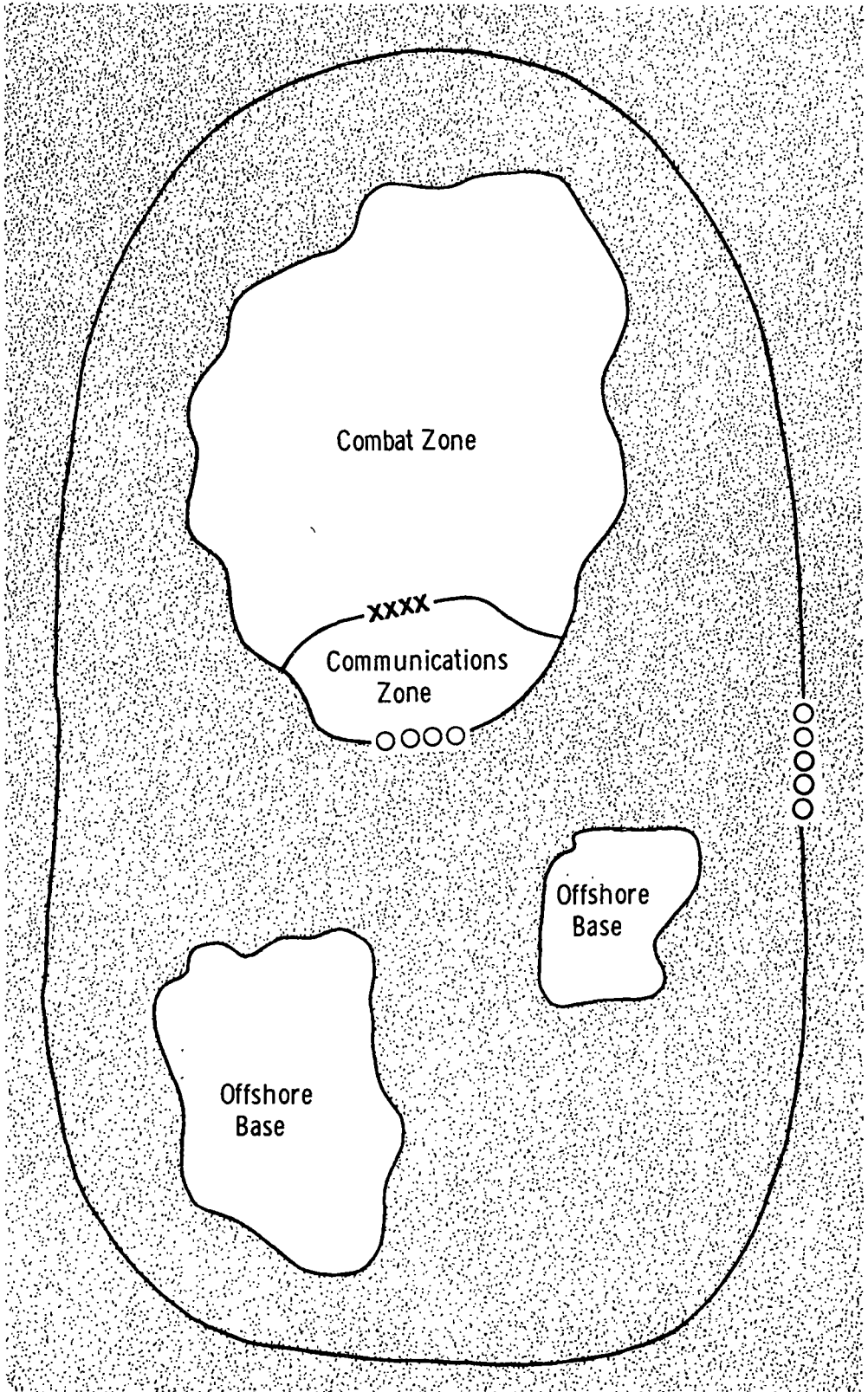
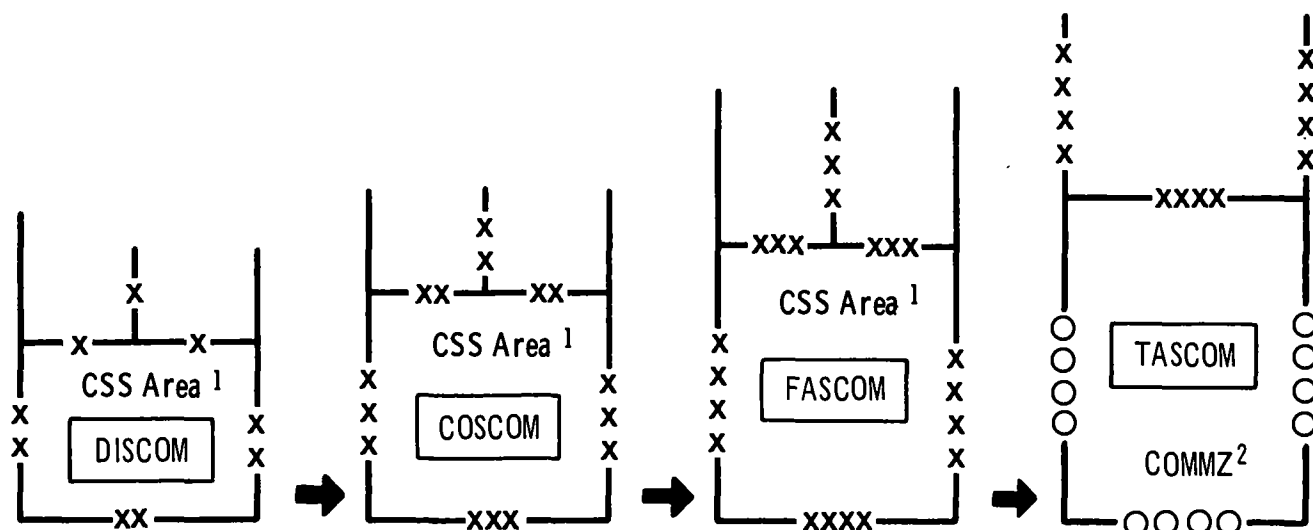


Figure 3-4. Theater of operations, island campaign (schematic).



¹ Territorial responsibility normally assigned to the commander of the Army forces.

² Development as shown in figures 3-6 and 3-7.

Figure 3-5. Establishment of a division combat service support area with subsequent phasing to and development of a communications zone (schematic).

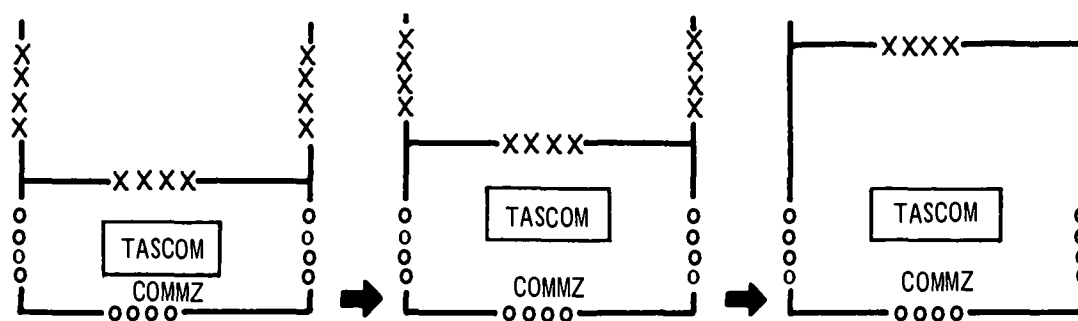


Figure 3-6. Expansion of a communications zone (schematic).

and provide direct combat service support for the TASCOS commands and other designated forces in the COMMZ. Paragraph 3-12d(6) discusses the mission of the TAACOM.

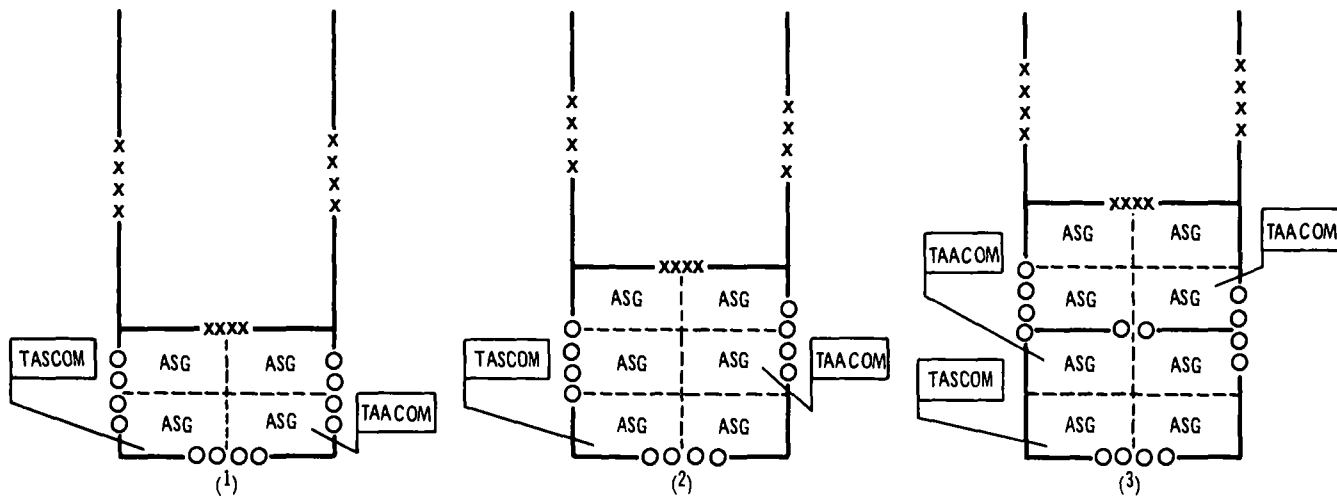
3-5. Combat Zone

The depth of the combat zone depends on the forces involved, the nature of planned operations, the character of the lines of communications, the terrain, and enemy capabilities. Normally, the combat zone is divided into field army, corps, and division areas (fig. 3-8). Each area is under the control of the commander of the organization to which it pertains.

3-6. Boundaries

a. Boundaries delineate territorial responsibil-

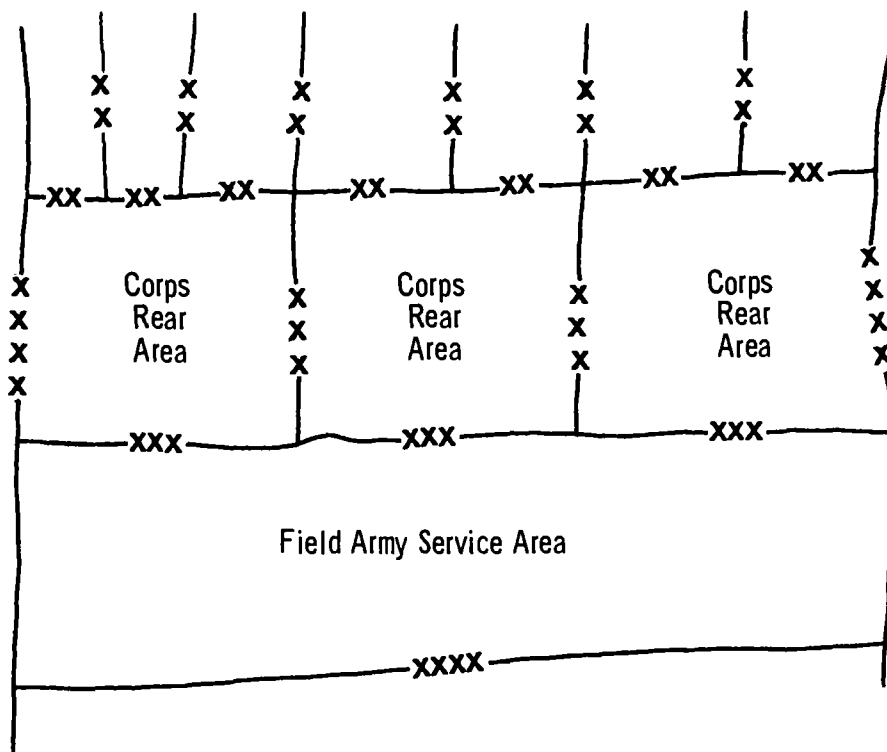
ity and aid coordination of combat service support operations. The President, through the Secretary of Defense, establishes the geographic limits of a theater of operations. The theater commander designates the rear boundary of the combat zone, normally on the recommendation of the theater army commander. Army group usually retains no territorial control; thus field army rear boundaries would coincide with the rear boundary of the combat zone. Army commanders designate corps rear boundaries and corps commanders designate division rear boundaries. Commanders establish rear boundaries of subordinate commands as far forward as practicable to reduce territorial responsibilities of the combat commands. The field army rear boundary is the forward boundary of the COMMZ. When the theater commander does not desire to extend the territorial responsibility



LEGEND

- ASG Area support group.
Indicates general areas rather than boundaries.
- ¹TASCOM area (COMMZ) with one TAACOM having four ASG.
²TASCOM area (COMMZ) with one TAACOM having six ASG.
³TASCOM area (COMMZ) with two TAACOM having four ASG each.

Figure 3-7. Development of a subdivided communications zone (schematic).



NOTE: The field army rear boundary (XXXX) normally is also the army group rear boundary (XXXXX).

Figure 3-8. Example of territorial organization of the combat zone (schematic).

of the COMMZ to the rear of the theater of operations, he may designate a different rear boundary for the COMMZ. Territorial responsibility for bodies of water separating landmass areas within the COMMZ is normally assigned to the theater navy commander.

b. Considerations affecting the location of rear boundaries include—

(1) Locations far enough to the rear to provide room for maneuver and suitable area for combat service support installations.

(2) Movement forward as soon as practicable to relieve combat units of the administration of territory not required for their operations.

(3) Location in relationship to the road net and other lines of communication. Corps requires good lateral routes behind divisions rear boundaries to facilitate movement of troops and supplies.

(4) Identification with easily recognizable terrain features, such as roads, railroads, rivers, and canals.

(5) Planning the movement of the rear boundary well in advance to permit reconnaissance before the transfer of territorial responsibilities.

(6) If feasible, the use of political boundaries as a means of reducing the coordination requirements of the commander having territorial responsibility.

c. Boundaries are not barriers to combat service support operations. Through coordination between responsible headquarters, service installations and operations of one command may be present in the area of another.

3-7. Internal Defense and Internal Development Operations

Organization for internal defense and internal development operations depends on the nature of the insurgency, the desires and capabilities of the host country government, the type and amount of US support requested and required, and the presence of third country Allied forces. During an insurgent movement, and depending on its intensity, the government of the developing nation may have from full to very limited control of the population and resources of the national area. Characteristically, combat service support and combat operations will take place in the same geographic area, and there will be no COMMZ and combat zone as such. Consequently, the organization of the area varies according to the situation and is considerably different from that in a theater of operations in a limited or general war. Organization of the area thus may require modification of the system described herein. Because the host country retains its sovereignty, location of installations and bases is largely dependent on the areas that the host country makes available.

Section III. THEATER COMPONENT COMMANDS

3-8. General

a. The US theater of operations as discussed in this manual is a unified command established on an area basis (JCS Pub 2). The commander organizes the unified command in a manner consistent with the fulfillment of the mission and according to the characteristics and military service identity of the forces assigned.

b. The organization of the military service forces in a theater is usually unilateral along departmental lines; thus, each component force (Army, Navy, and Air Force) has its own organization for providing combat service support. Exceptions occur when support is otherwise provided for by agreements or assignments involving common, joint, or cross-servicing at force, theater, military department, or Department of Defense level, e.g. medical services.

c. Forces assigned to a unified commander will

normally consist of two or more service components, each of which will be commanded directly by an officer of that component. Unless authorized by the establishing authority, the commander of service components or other subordinate commands will not be the unified commander (JCS Pub 2).

d. A component command consists of the component commander and the individuals, organizations, and installations under his military command that are assigned to the operational command of the unified command commander. Other individuals, organizations, and installations may operate directly under the component commander in his service role and contribute to the mission of the unified command as appropriate.

e. Each component commander is responsible for making recommendations to the unified command commander (theater commander) on the

proper employment of his component, and for accomplishing such missions as the commander of the unified command assigns. Each component commander communicates directly with his service chief (Chief of Staff, US Army, for Army component commanders) on uniservice matters relating to administration, personnel, training, logistics, communications, doctrine, combat developments, and other matters of uniservice interest. When intelligence matters are of uniservice interest, the component commander communicates directly with his service chief.

f. The component commander is responsible for—

(1) Internal security, administration and discipline.

(2) Training in own service and joint doctrines, techniques, and tactics.

(3) Logistic functions normal to the component, except as higher authority otherwise directs.

(4) Tactical employment of the forces of his component, not under operational command of a joint or combined force or other designated commander.

(5) Service intelligence matters.

g. The component commanders operate their combat service support systems in accordance with departmental instructions, subject to the directive authority of the theater commander in the field of logistics (JCS Pub 2). This directive authority of the theater commander insures effectiveness and economy of operations and prevents or eliminates unnecessary duplication of facilities and functions among the service components. It includes review of budgets and requirements of the service components and coordination of priorities and programs to use supplies, facilities, and personnel effectively and provide a balanced effort in the furtherance of the theater mission. The theater commander normally exercises this authority by establishing controls on the following service component functions:

(1) Acquisition, storage, movement, distribution, maintenance, evacuation, and disposition of materiel.

(2) Movement and evacuation of personnel.

(3) Acquisition or construction, maintenance, operation, and disposition of facilities.

(4) Acquisition or furnishing of services.

3-9. Army Component Commander (Theater Army Commander)

a. Paragraphs 3-8f and 3-8g delineate some of the theater army commander's responsibilities as a component commander. He also is responsible for broad policies pertaining to US Army forces in the theater and for the command of all US Army forces assigned to his command.

b. Strategic and tactical direction of US Army forces in a theater of operations is exercised by the unified command (theater) commander (or combined command commander when a combined command is established) through the US Army component commander. The theater commander may establish a subordinate unified command headquarters through which operational command will be exercised. Within the subordinate unified command, operational command is normally exercised through the service component commander. Commanders of service components of subordinate unified commands will communicate directly with the commanders of the service components of the unified command on matters which are the responsibility of the military departments and services, or as directed by their chief or service.

c. Figure 3-9 illustrates the basic elements of a theater army command. The commanders of the TASCOM, the engineer command (ENCOM), and the field army have responsibility for all the combat service support means needed to perform their respective missions in the combat zone and the COMMZ, subject to policy guidance and directives of the theater army commander.

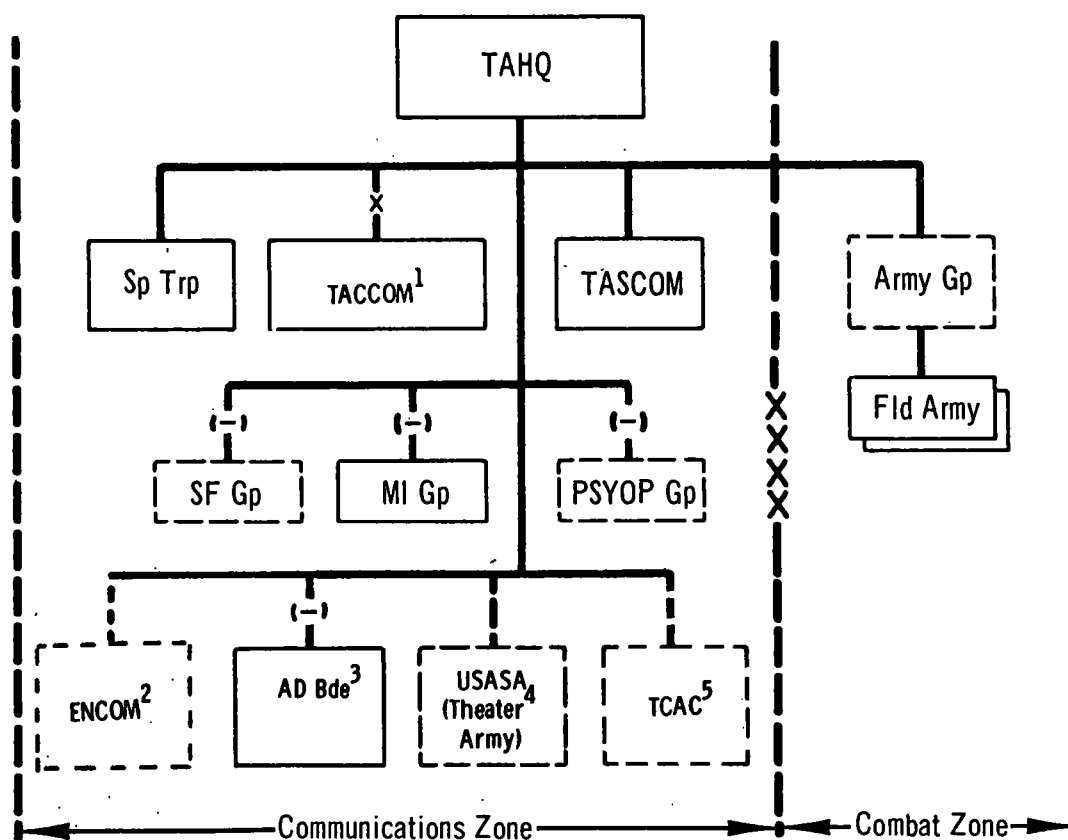
d. The combat service support mission of US theater army is to—

(1) Organize and operate the necessary services for combat service support of US Army forces in the theater. This entails long range planning, estimates of personnel and logistic requirements, and efficient use of means. It requires close liaison with collateral and higher headquarters, the TASCOM, and other commands directly subordinate to US theater army. The theater army commander normally assigns his territorial responsibility to subordinate commanders.

(2) Supply common items and common services to Air Force and Navy elements in the theater as provided for by agreements or assignments.

(3) Provide combat service support to civilian and other agencies and forces as directed.

(4) Allocate critical and regulated items of supply as directed by the theater commander.



LEGEND

----- As required.

————— Command.

—X— Operational control.

—(-)— Command. During wartime, the commander of the unified or combined command normally exercises operational command.

¹THEATER ARMY COMMUNICATIONS COMMAND.

²MAY BE ASSIGNED TO TASCOM.

³MAY BE DESIGNATED AS AD COMMAND.

⁴PROVIDES SUPPORT IN ACCORDANCE WITH AR 10-122.

⁵THEATER CIVIL AFFAIRS COMMAND (SEE PAR 3-14 FOR ASSIGNMENT).

Figure 3-9. Theater army organization (large theater of operations).

e. The theater army commander retains overall control of combat service support operations to insure uniformity of the support effort in the combat zone and the COMMZ. He applies control through promulgation of appropriate policies, mission directives, broad planning and program guidance, allocations, and priorities for accomplishing the theater army mission. The theater army commander normally assigns responsibility and delegates authority for implementing and accomplishing the foregoing to the TASCOM,

ENCOM (when appropriate), and the field armies for their respective missions. This includes the delegation of authority to the TASCOM to control throughput shipments that originate in the TASCOM area.

f. The theater army commander normally assigns responsibility and delegates commensurate authority to the TASCOM and ENCOM commanders to issue technical instructions and to conduct technical inspections applicable to the entire force supported. In addition, such assignment

and delegation will be announced formally to insure unquestioned validity and proper dissemination to all concerned.

g. In some conflicts, theaters of operations may be smaller than that implied in *d*, above. In such cases, the Army component of the theater may consist of a single field army or a smaller force. The concepts of organization, mission, and functions outlined above are applicable to the smaller theater, modified as necessary to satisfy the requirements of a particular theater. When a corps is the major Army component of a theater, its normal preoccupation with the combat mission may preclude the assignment of theater army responsibilities. In this case, a theater army headquarters of appropriate size is usually established. When corps headquarters has theater army responsibilities, it is, in effect, the Army component command.

3-10. Navy Component Commander

a. Responsibilities of the navy component commander for naval forces under his command generally parallel those of the theater army commander for theater army forces.

b. Navy combat forces with logistic elements formed in a task organization are assigned to the theater from a numbered fleet. The navy compo-

nent commander exercises command through the commander of the Navy combat forces. Navy forces assigned to the theater are structured for the task anticipated.

c. In addition to the elements under the army component commander, other navy elements used for strategic operations may be present in the theater under the operational direction of the Department of Defense or a specified command.

3-11. Air Force Component Commander

a. Responsibilities of the air force component commander for Air Force elements under his command generally parallel those of the theater army commander for theater army forces.

b. Allocation of Air Force combat forces to the theater is on the basis of the assigned mission. Air Force logistic elements in the theater down to depot level remain under the command and control of the Air Force Logistics Command in the CONUS but are immediately responsive to the air force component command.

c. In addition to the elements under the air force component commander, other Air Force elements used for strategic operations may be present in the theater under the operational direction of the Department of Defense or a specified command.

Section IV. ORGANIZATIONS IN THE COMMUNICATIONS ZONE

3-12. Theater Army Support Command

a. *General.* For details on the TASCOM, see FM 54-7.

b. *Mission.* The TASCOM provides combat service support to Army forces in a theater of operations and to other forces as designated. Services provided include—

- (1) General support to the field army.
- (2) Direct and general support to the COMMZ.
- (3) Rear area protection (RAP) in the COMMZ.
- (4) Area emergency warning in the COMMZ.

c. *Functions.* Combat service support functions performed by the TASCOM include personnel, administrative, and morale services; and civil affairs (CA), labor, materiel maintenance, supply, transportation, hospitalization and evacuation, and other logistical services. The TASCOM func-

tions will also include construction, topographic support and real property maintenance activities (RPMA) when the ENCOM is assigned to the TASCOM. The TASCOM commander will normally be assigned responsibility and delegated authority to issue technical instructions and to conduct technical inspections applicable to the entire force supported. The TASCOM commander, when delegated authority, may further assign responsibility and delegate commensurate authority within his command (less the theater army area command) to issue technical instructions and to conduct technical inspections applicable to the force supported.

d. *Organization.* The TASCOM may be organized with five or six major subordinate commands and, in addition, normally has a civil affairs brigade, as shown in figure 3-10. The ENCOM may be assigned directly under the theater army commander. Five of these commands (personnel, medical, materiel, transportation, and engineer) pro-

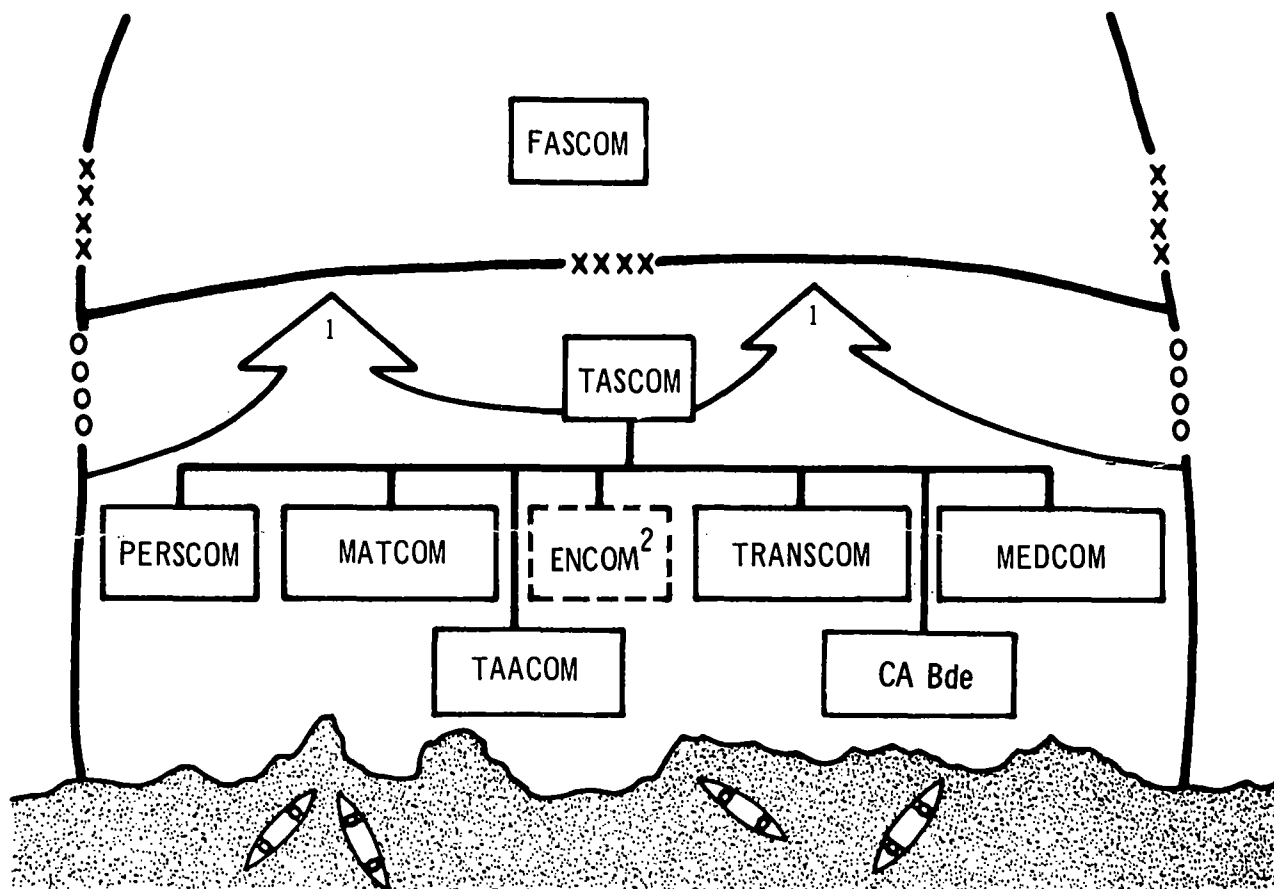
vide general support (GS) to the combat zone and the COMMZ. The medical command furnishes direct support (DS) medical services in the COMMZ, and the materiel command (MATCOM) is responsible for providing DS ammunition service. The DS map supply and RPMA services in the COMMZ are provided by the ENCOM. The sixth command, the TAACOM, provides DS (less medical, cryptologic, RPMA, map supply, and ammunition), area emergency warning, and RAP in the COMMZ. The subordinate commands of the TASCOM and their missions are:

(1) *Personnel command.* The personnel command (PERSCOM) directs, coordinates and provides GS personnel, administrative, morale (chaplain, postal and special services), internment (prisoner of war and civilian internee), and graves registration services to the theater. For more detailed information, see FM 29-6.

(2) *Medical command.* The medical command (MEDCOM) provides COMMZ level medical support (para 17-9a) within the theater of operations. The MEDCOM provides command, control, staff planning, and supervision of operations, training, and administration of hospital centers and medical groups engaged in COMMZ level medical support. For more detailed information, see FM 8-10.

(3) *Transportation command.* The transportation command (TRANSCOM) provides Army transportation services to a theater of operations. Transportation services provide combat service support in four functional areas: staff transportation, movements management, mode operations, and terminal services. For more detailed information, see FM 55-1.

(4) *Materiel command.* The materiel command (MATCOM) provides an integrated system



¹General support combat service support to the combat zone.

²ENCOM may be assigned directly under the theater army commander.

Figure 3-10. Organization of a theater army support command (TASCOM).

of GS supply, maintenance, and services to US Army forces and to other elements of the theater, as directed. The MATCOM's major functions include: theater supply management; theater inventory control; repair of unserviceable items for return to theater stockage; materiel utilization screening; procurement; disposal of surplus property; and theater maintenance management.

(5) *Engineer command.* The engineer command (ENCOM) provides general troop and contractual construction support and RPMA to the Army and other services and allies within the COMMZ; and support of the field Army on a task basis, as required. The ENCOM may be assigned directly under the theater army commander.

(6) *Theater army area command.* The theater army area command (TAACOM) provides direct support supply, maintenance, personnel, and other service (less medical, ammunition, communications security, RPMA, and map supply) to the TASCOM, to units passing through or located in the COMMZ, and to other forces as directed. The TAACOM is also responsible for planning, coordinating and executing RAP operations within the COMMZ.

(7) *Civil affairs brigade.* The CA brigade is normally employed to exercise command and control (centralized execution) or command less operational control (decentralized control) over civil affairs units operating in the COMMZ, and is the CA or civil-military operations staff element of the TASCOM.

e. Forces Supported by the Theater Army Support Command. Forces supported by the TASCOM include the following:

- (1) The US Army elements of joint, unified, or combined headquarters and units.
- (2) Headquarters, theater army (TA).
- (3) Headquarters, army group (when used).
- (4) One or more field armies.
- (5) Theater army air defense command (when used).
- (6) Theater civil affairs command (TCAC) (when used).
- (7) Theater army military intelligence group (when used).
- (8) Theater army reserve units.
- (9) Theater army communications command (TACCOM).
- (10) Theater army support command units.
- (11) The US Army Security Agency (USASA) units.

(12) Other US Army units located in or passing through the COMMZ.

(13) Other US military services, US government agencies, Allied military forces, and civilian populations so designated by the theater army commander.

(14) Engineer command when assigned to theater army.

f. Relationships with Other Headquarters.

(1) *With theater army.* Theater army headquarters provides mission-type orders to the TASCOM for the conduct of theater army activities, together with necessary policies, priorities, allocations, directives, and guidance for execution of assigned missions. Theater army headquarters formulates procedures and guidance for the establishment of appropriate channels of communication between the CONUS and the TASCOM; between the TASCOM and other services, Allied forces, and governments; and between the TASCOM and the field army. Theater army headquarters delegates to the TASCOM responsibility for the conduct of combat service support, area emergency warning, and RAP operations in the COMMZ. The TASCOM communicates directly with COMMZ agencies and the field army in the conduct of operations, within policies stated by theater army. Theater army headquarters assigns the TASCOM responsibility for preparing detailed combat service support plans, directives, and guidance affecting the theater as a whole. Upon approval of theater army, such plans, directives and guidance are issued in the name of the theater army commander.

(2) *With theater headquarters when a theater army headquarters is not used.* The US Army element of a joint, unified, or combined staff can provide the direction of TASCOM support of US Army combat forces that is normally provided by a theater army headquarters.

(3) *With field army.* Regardless of the command structure within theater army, the TASCOM must receive quantitative requirements for support from the field army stated in terms of what, where, and when personnel replacements, supplies, services, and equipment are needed. The TASCOM assists the field army in formulating these requirements and supports field army requirements. For routine operations the field army support command (FASCOM) and TASCOM subordinate commands maintain continuing working relationships through liaison and technical channels.

(4) *With theater army communications command.* The theater army communications command (TACCOM) provides and operates the theater army communication system (TACS) and provides the integration of the TACS with the defense communications system (DCS) worldwide military command and control system (WWMCCS). The TACCOM provides on an attachment basis the signal operations companies that operate the internal communications of the major headquarters and area-oriented units of the TASCOM as part of the TACS command and area subsystems in the COMMZ. The TASCOM provides combat service support to the TACCOM in accordance with the overall support agreement.

(5) *With the military intelligence group theater army.* The group provides military intelligence (MI) support to the theater army by operating in direct support of the theater army headquarters and in general support of the MI units assigned to the field army and TASCOM.

(6) *With Allied or indigenous forces.* The TASCOM provides combat service support as directed by theater army. Once the type of support to be provided is determined, the TASCOM assists Allied and indigenous forces in formulating the support required and insures rapid reaction to demands in much the same manner that support is provided the US field army.

(7) *With all organizations supported.* The TASCOM provides combat service support as designated by theater army. Theater army directs the degree of authority that the TASCOM will exercise over other organizations in the COMMZ in performing area emergency warning and RAP activities.

3-13. Theater Army Communications Command

a. General. This command extends communications from the theater rear boundary, where access to the defense communications system WWMCCS is available, into army group and field army areas, where communications access points are established at army area signal centers. It also provides the command and area subsystems in the COMMZ and cryptologic support to the theater. Signal units of the theater army communications command are attached to major headquarters and area-oriented units of the TASCOM. The theater army communications command is under the operational control of the theater army commander

and receives direct and general combat service support from the TASCOM.

b. Communications Security Logistics Support.

(1) Organizational elements for providing communications security (COMSEC) logistic support in a theater of operations are the theater COMSEC logistic support center (TCLSC), the COMSEC logistic support center (CLSC), and the COMSEC logistic support unit (CLSU).

(2) The TCLSC is the principal COMSEC logistic support facility in the theater. The TCLSC is an element of the theater army communications command and, as such, is responsive to the Army component commander through the theater army communications command commander.

(3) The CLSC provides COMSEC logistic support to a field army or equivalent force, and to other activities as directed; e.g., other services, the U.S. Department of State, and Allied commands. The CLSC is responsive to the field army commander through the field army communications-electronics (C-E) staff officer and is under the technical direction of the TCLSC.

(4) The CLSU in a typical field army is an organic element of the CLSC on the basis of two per corps. It provides DS and GS and has a mobile maintenance capability. The CLSU may be established to meet variations in the typical theater or field army. It can be an organic element of a TCLSC or a separate unit for support on a geographical area basis. In the latter case, the CLSU may be an element of a theater army communications command subordinate command but remains under the technical direction of the TCLSC.

3-14. The Theater Civil Affairs Command

When used, the theater civil affairs command (TCAC) operates as a CA or civil-military operations staff element of a combined, theater, or theater army command, and may serve as a CA command in a theater of operations. Should the theater commander desire to delegate civil affairs authority, he normally delegates authority for the combat zone and the COMMZ to the theater army commander when theater army is in the operational chain of command. The theater army commander may accomplish the CA mission with the TCAC or a CA brigade, as appropriate.

3-15. Theater Army Military Intelligence Group

When used, this group assists in performing mili-

tary intelligence activities for which theater army headquarters normally retains centralized control. Such activities include overall direction of the intelligence effort, including technical intelligence. Both the field army and the TASCOM are assigned military intelligence units. The TASCOM provides combat service support to military intelligence units.

Section V. ORGANIZATIONS IN THE COMBAT ZONE

3-17. Army Group

a. The employment of army groups is necessary in a large theater of operations where the land force structure comprises two or more field armies. In small theaters, the largest land force element may be a single field army or an independent corps.

b. The army group directs the strategic and tactical operations of two or more field armies. It functions under the operational control of the theater army commander. In a combined theater, it may function under the operational control of a senior combined land force headquarters.

c. The TASCOM supports the army group and its subordinate elements.

d. The army group normally does not operate combat service support installations. It does, however—

- (1) Establish priorities for supplies for its assigned and attached troops.

- (2) Establish priorities for movements.

- (3) Establish priorities for the allocation of replacements to major subordinate commands.

- (4) Allocate available service troops to major subordinate commands.

- (5) Normally control allocation of ammunition to major subordinate commands and may control allocation of other items and services in accordance with assigned tactical missions.

- (6) Determine the adequacy of support to subordinate units by supporting theater army commands.

- (7) Estimate overall combat service support troop and resupply requirements to support operations and make recommendations to the theater army commander for the allocation of appropriate means.

- (8) Assign territorial responsibilities to subordinate field armies.

- (9) Supervise and coordinate the CA activities of subordinate and supporting units.

3-16. Other Major Units

The TASCOM provides combat service support to the theater army air defense command, theater army reserve forces, USASA units, other units and other military services, Allied military forces, local governments, and civilian populations as directed by the theater army commander.

3-18. Field Army

a. The field army commander is responsible to the army group commander, theater army commander, or combined land force commander for combat operations; and to the theater army commander for combat service support operations in the field army. In a combined theater, the field army commander may be responsible to a US army group commander for combat, combat support, and combat service support operations in the field army; or he may be under the operational control of a senior combined land force headquarters and receive combat service support from the US theater army.

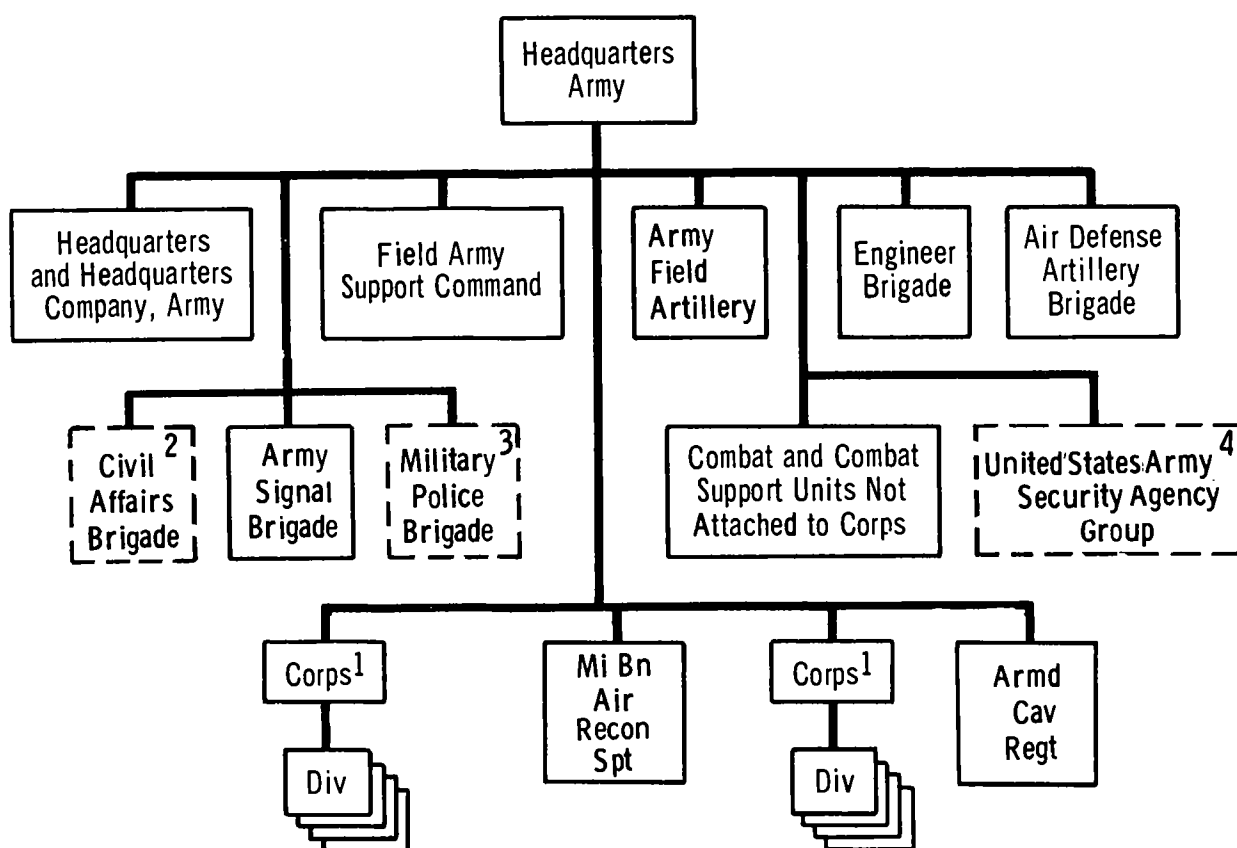
b. The field army is the largest self-contained US Army organization that has combat, combat support, and combat service support functions. It consists of a headquarters; a FASCOM; a variable number of corps and divisions; and other units, such as artillery, signal, and engineer.

c. The field army has no fixed organization. Determinants in the numbers and types of corps, divisions, and other combat and supporting elements are the mission, availability of forces, availability and use of nuclear weapons, terrain, climate, and probable hostile forces. Figure 3-11 shows the organization of a typical field army based on two corps of four divisions each, less details of combat service support elements.

d. The field army commander is responsible for the organization and operation of services necessary for the immediate support of units in the field army. This requires long range planning, preparation of detailed estimates of combat service support needs, and close liaison with other major commands.

3-19. Field Army Support Command

a. *General.* For details on the FASCOM, see FM 54-3.



¹ Figure 3-13 shows the organization of a typical corps.

² Normally assigned to FASCOM.

³ May be assigned or attached to a field army or a FASCOM.

⁴ Attached as required.

Figure 3-11. Organization of a typical field army.

b. Mission. Within assigned responsibilities, the FASCOM provides combat service support to a field army (or other supported forces). The FASCOM is normally responsible for RAP for the field army service area.

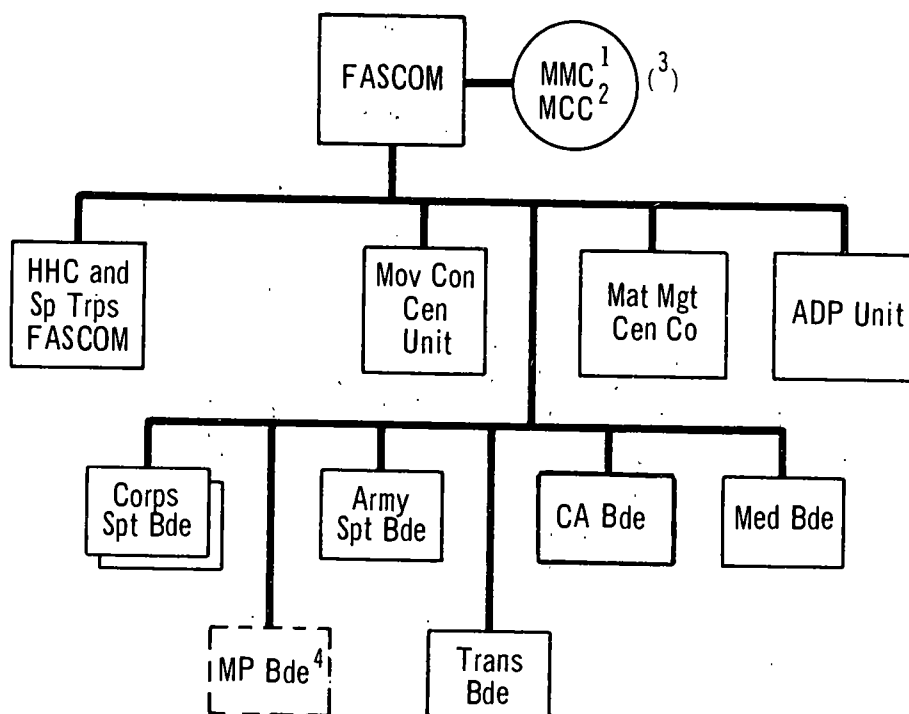
c. Functions. Combat service support functions performed by the FASCOM include personnel and administration services, civil affairs, maintenance, supply, transportation, and other services.

d. Construction Function. The FASCOM does not have a construction function. The field army engineer provides and exercises staff and technical supervision over construction in the combat zone through the army engineer brigade and the corps engineer brigades. When the construction capabilities of these units is exceeded, construction units of the ENCOM are sent forward from the communications zone to complete mission-type tasks. In this event, their activities are coordi-

nated by the field army engineer with the appropriate ENCOM engineer officer.

e. Organization. The FASCOM normally supports a field army with a headquarters and associated functional control centers, the materiel management center (MMC), and the movement control center (MCC). Major FASCOM commands normally include two or more corps support brigades, an army support brigade, and two Army-wide service brigades—medical and transportation. A civil affairs battalion may be attached by the civil affairs brigade at field army. Field army headquarters may attach a military police (MP) element to the FASCOM. Figure 3-12 shows the organization of a typical FASCOM.

(1) *Corps support brigade.* The corps support brigade must be responsible to the combat service support needs of the corps tactical units.



¹MATERIEL MANAGEMENT CENTER.

²MOVEMENT CONTROL CENTER.

³PERSONNEL ARE PROVIDED BY THE MATERIEL MANAGEMENT COMPANY AND THE MOVEMENT CONTROL UNIT.

⁴MAY BE ASSIGNED TO FIELD ARMY AND ATTACHED TO FASCOM.

Figure 3-12. Organization of a typical field army support command (FASCOM).

The corps support brigade provides GS supply, maintenance, transportation, personnel services, and finance support to divisions and separate brigades and DS and GS to nondivisional units within the corps area. Figure 3-13 shows the organization of a corps support brigade supporting a four-division corps.

(2) *Army support brigade.* The Army support brigade provides DS and GS to all Army units and to units of other services, as directed, located in or transiting the field army service area. However, the army support brigade does not provide transportation, movements control, or ammunition services. The corps support brigades provide ammunition services for the corps slices of field army while the FASCOM provides transportation and movements control services in the field army service area. Figure 3-14 shows the organization of an army support brigade supporting an eight-division force.

f. Relationships with Other Headquarters.

(1) *With field army.* Field army headquarters issues mission-type orders to the FASCOM.

The FASCOM develops detailed plans, policies, and directives for combat service support in conformance with field army policies, directives, and guidance; and performs assigned missions.

(2) *With corps.* The FASCOM is on an equal command level with the corps. The corps headquarters does not provide combat service support to units in the corps area or to divisions. The FASCOM furnishes this support, maintains coordination with the corps, and assists the corps in RAP activities.

(3) *With supported divisions and nondivisional units.* The FASCOM provides general combat service support to divisions and separate brigades and direct and general combat service support to nondivisional units. The FASCOM also provides backup direct support to divisions when required.

(4) *With field army engineer and signal brigades.* The FASCOM forwards construction, RPMA, and communications requirements to field army. Priorities established by field army for these requirements are the basis for mission or-

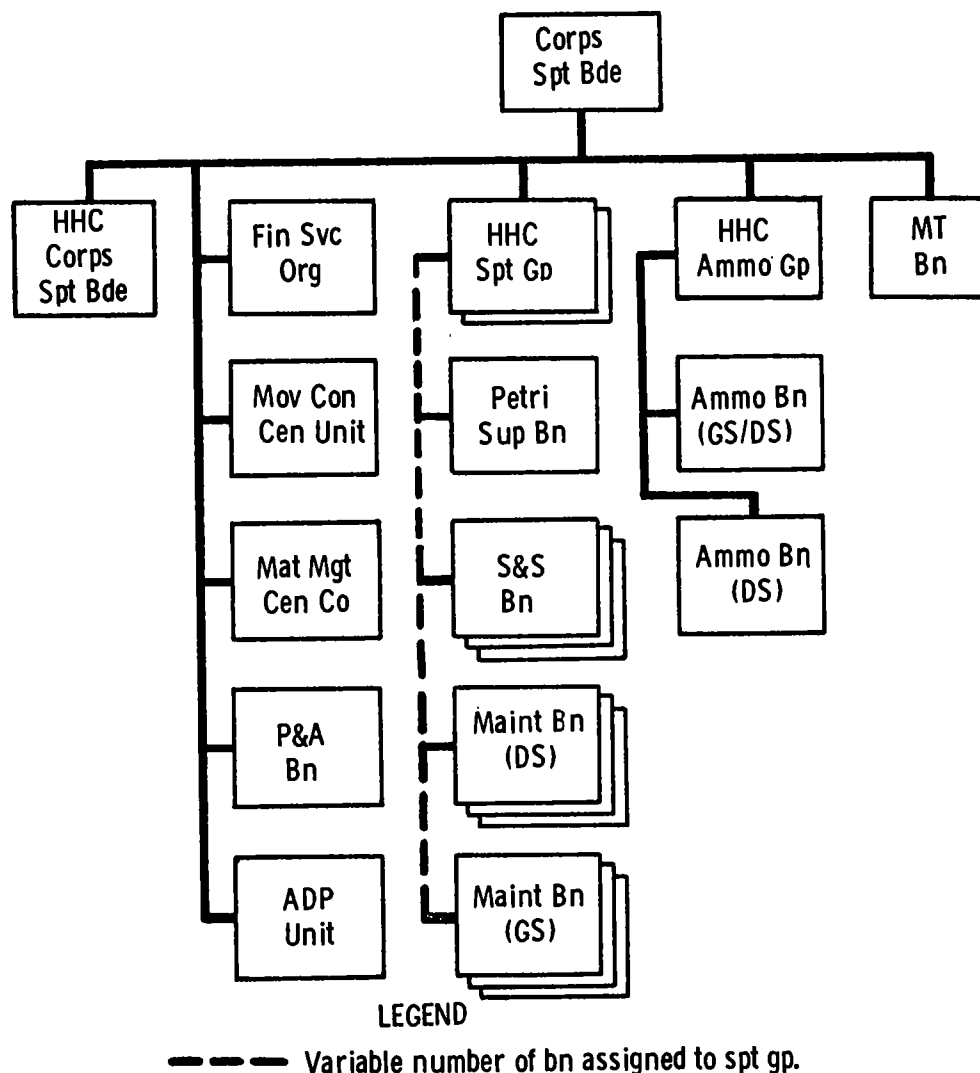


Figure 3-13. Organization of a corps support brigade supporting a four-division corps.

ders to engineer and signal units in support of the FASCOM.

(5) *With field army civil affairs brigade.* The FASCOM accomplishes the civil affairs mission through a civil affairs brigade which is normally employed to exercise command and control (centralized execution) or command less operational control (decentralized control) over civil affairs units operating with the field army.

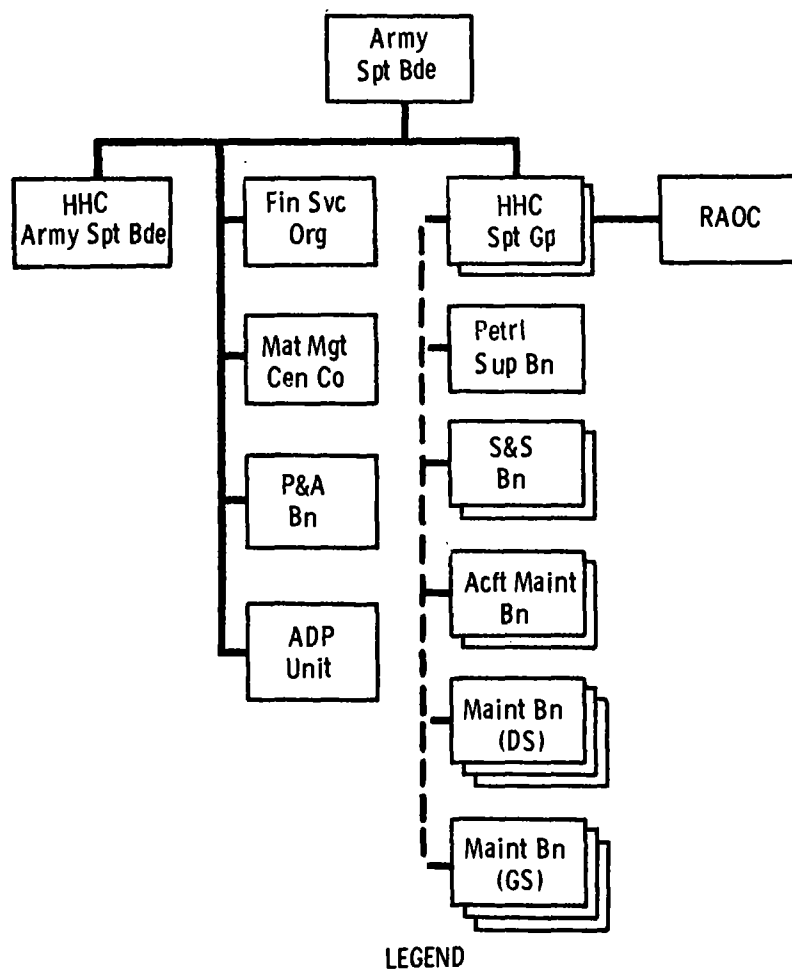
(6) *With theater army support command.* The FASCOM maintains a close working relationship with TASCOT. Functional control centers of the FASCOM place requirements on their counterpart centers in the TASCOT. Coordination of interzonal movements of replacements, units, and supplies requires placement of TASCOT liaison personnel at critical control points in the field army.

(7) *With other services, other national*

forces, host nations, and host nation military organizations. Within the policies of field army, the FASCOM establishes and maintains necessary working relationships. The FASCOM uses the resources and capabilities of other US services and forces of other nations to provide combat service support to the field army. The FASCOM also may support these forces in furtherance of the field army mission.

3-20. Corps

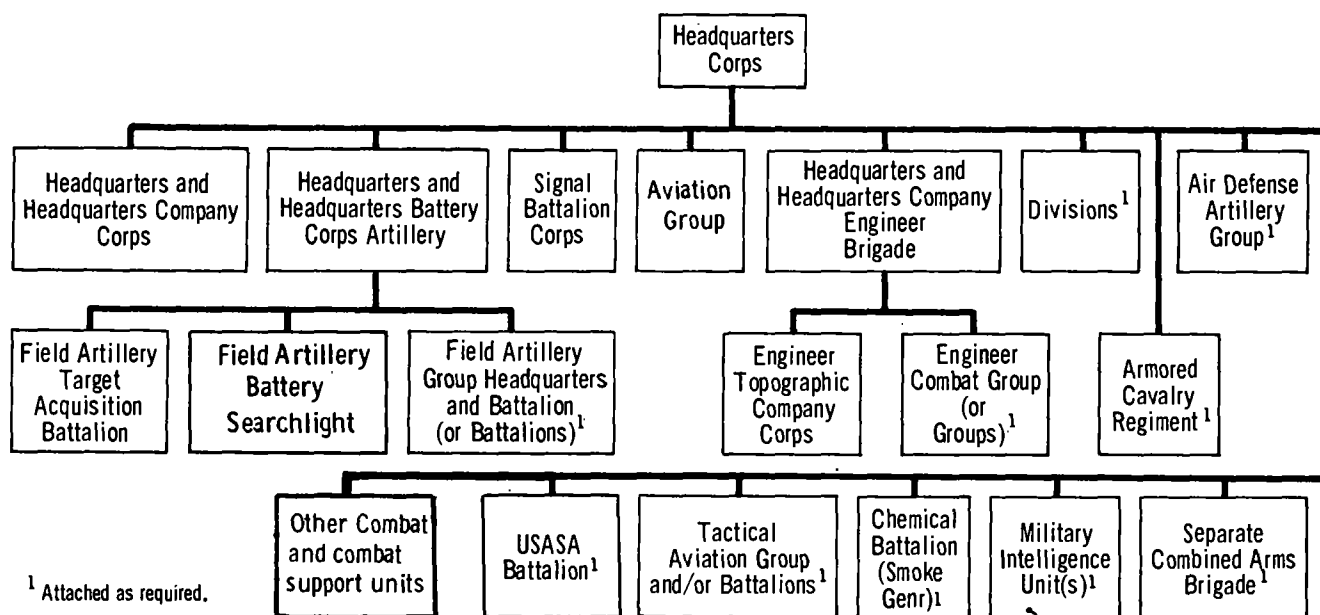
a. The corps is primarily a tactical headquarters and is not normally in the combat service support channel between divisions and field army. The corps is essentially a tactical organization of the combined arms employing a variable number of divisions, brigades, and combat support units. Figure 3-15 shows the organization of a typical corps.



LEGEND

--- Variable number of bn assigned to spt gps.

Figure 3-14. Organization of an army support brigade supporting an eight-division force.



¹ Attached as required.

Figure 3-15. Organization of a typical corps.

b. Because the corps is primarily a tactical organization, comparatively few combat service support troops are on the usual corps troop list. Normally, the corps controls combat service support units only when operating as a separate or independent corps. The difference between a separate and an independent corps are explained in paragraph 3-21.

c. The corps commander normally influences combat service support only to the extent necessary to assist operations of the corps. His actions include—

(1) Establishing priorities and allocations for combat service support, as required, to include allocating ammunition, regulated, and command-controlled items.

(2) Assigning territorial responsibility to subordinate units.

(3) Insuring that subordinate units are adequately supported.

(4) Supervising and coordinating the civil af-

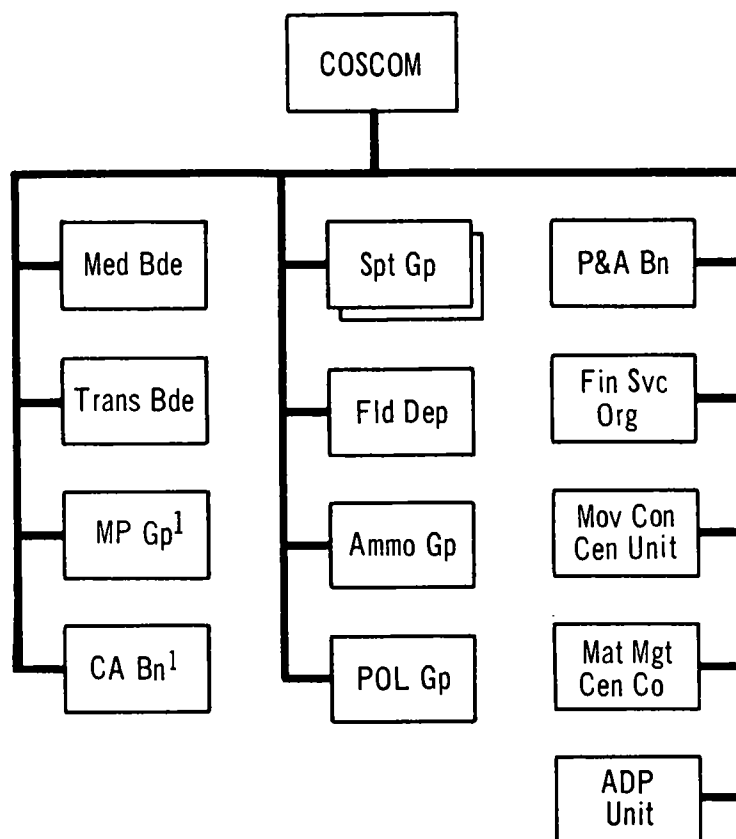
fairs activities of subordinate or supporting elements.

(5) Recommending to the corps support brigade commander (and to commanders of elements of the army-wide service brigades designated to support the corps) measures concerning support of units attached to the corps.

(6) Exercising territorial responsibility for the corps rear area and allocating areas to the corps support brigade and to elements of the army-wide service brigades operating in the corps rear area.

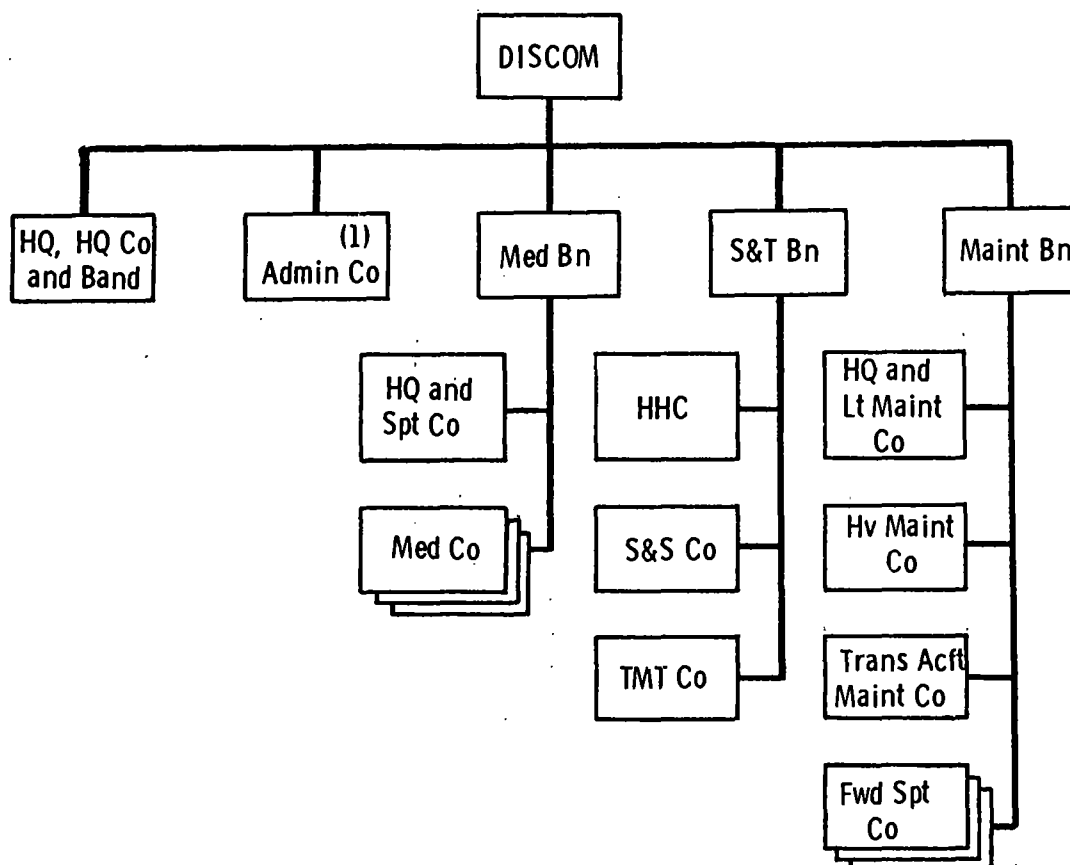
(7) Planning for highway regulation and traffic control in the corps rear area.

d. For independent or separate corps operations, necessary combat service support elements augment the corps support brigade and the brigade functions as the COSCOM. In such circumstances, the corps normally operates directly under a headquarters higher than field army or as part of a joint task force.



¹May be assigned or attached.

Figure 3-16. Organization of a typical corps support command (COSCOM) supporting a three-division independent corps.



¹The DISCOM commander's responsibilities are limited to tactical, security, and movement aspects. The admin co is normally located at division rear.

Figure 3-17. Organization of an armored, infantry, and mechanized infantry division support command (DISCOM).

3-21. Corps Support Command

a. The COSCOM provides combat service support for a separate corps force and has the status of a FASCOM. The COSCOM is assigned to and receives its direction from the corps commander. The basis of allocation is one COSCOM per separate or independent corps. The COSCOM exercises command, control, and supervision of all combat service support units assigned or attached for support of the corps force.

b. The COSCOM provides combat service support to Army forces in a theater of operations and to other forces as designated when assigned to an independent corps. An independent corps is the largest land force in the theater; it has the status of a theater army, with area responsibilities encompassing the theater base. The COSCOM is responsible for all combat service support, including theater base activities.

c. The corps support brigade of the FASCOM provides the nucleus for the COSCOM. Sufficient combat service support elements augment this nucleus to enable the corps to conduct independent operations. The COSCOM has a headquarters, associated functional control centers, and assigned or attached operating units. The COSCOM headquarters is similar to that of a corps support brigade, and staff functions are similar to those of the FASCOM headquarters. The COSCOM is a structured organization and can support a variety of forces by the addition or the deletion of operating units. The operating units in the COSCOM are generally the same type as those that support a FASCOM or a TASCOC. Figure 3-16 shows the organization of a typical COSCOM for support of a three-division independent corps.

3-22. Division

a. The division is the basic unit of the combined

arms and services of the Army. It is the smallest unit in the Army in which all the arms and services are represented in sufficient strength to permit large-scale combat operations. Additional details on the division are contained in FM 61-100.

b. The DISCOM usually deals directly with the

supporting corps support brigade and other FASCOM support brigades on combat service support matters. Figure 3-17 shows the organization of a DISCOM. Additional details on the DISCOM are contained in FM 54-2.



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CHAPTER 4

PLANNING

(STANAG 2079, SEASTAG 2079)

Section I. COMBAT SERVICE SUPPORT PLANNING

4-1. General

a. Close coordination between planners of both combat and combat service support is essential. Combat service support may decisively influence combat operations.

b. Combat, combat support and combat service support concepts of operations must be developed concurrently. Combat service support planners should have information sufficiently in advance of a combat operation to arrange for combat service support. This information consists of strategic and tactical planning data needed for the preparation of practicable plans.

c. The principle of coordination among the combat, combat service support, and other planners of the army in the field necessarily extends to the Department of the Army staff and the United States Army Materiel Command (USAMC). Planning includes coordination with the Military Traffic Management and Terminal Service (MTMTS), the Military Sealift Command

(MSC), and the Military Airlift Command (MAC). The product is a series of combat service support plans to support Army forces in the field for varying lengths of time.

4-2. Enemy Nuclear, Biological, and Chemical Capabilities

Planners evaluate the impact of enemy capabilities for nuclear, biological, and chemical operations on the mission of the command. With the increased range and accuracy of delivery systems, no area in a theater of operations is free from the threat of attack. The commander determines the action he will take to avoid or reduce the effects of enemy weapons after he considers the mission of the command, the means available to accomplish the mission, and enemy capabilities. These factors directly influence the operation plan and layout of the combat service support areas. The objective is to reduce risks without producing inefficient operations and wasteful use of manpower and supplies.

Section II. TROOP PLANNING

4-3. General

a. Troop planning includes estimating personnel and equipment requirements to accomplish a mission. Such planning normally conforms to the personnel strength ceiling authorized the theater and subordinate commands. Personnel and equipment are authorized for units in a command by The Army Authorization Documents System (TAADS) (AR 310-49), which also provides the means to maintain total authorizations in the command. This information, coupled with assigned and on-hand data, provides the centralized information needed for CSS planning.

b. A troop list is a listing of specific military

units or individuals. A troop list usually contains the designation of each unit in a command's area or of each unit serviced by a command's automatic data processing unit. Such a list may include units located in an area but not assigned to the command, such as attached Allied units.

4-4. Principles of Troop Planning

The troop planner must continually analyze requirements. The following principles apply:

a. The force must meet its operational requirements.

b. The command structure must be sound.

c. The force must consist of the minimum essential manpower and equipment to accomplish the mission.

4-5. Combat Service Support Troop Requirements

Variable factors that influence combat service support troop requirements include—

a. Numbers and types of troops to be supported, their mission, and the extent of combat service support to be provided.

b. Quantity, types, and distribution of equipment.

c. Construction and RPMA requirements.

d. Climate and terrain.

e. Status of local resources in the area of operations.

f. Size of the area of operations.

g. Attitudes, availability, and capabilities of local civilians and prisoners of war.

h. Availability, capabilities, and limitations of combat service support units.

i. Enemy capabilities.

j. Needs of the inhabitants of the area which must be met from military stocks.

4-6. Basic Steps in Troop Planning

The following steps are essential to sound troop planning:

a. Determining tasks and resources.

b. Determining workload.

c. Selecting types of units with required capabilities.

d. Calculating number of units required, including type B units.

e. Making provisions for command and control.

f. Determining desired time-phased arrival of units at their destination.

4-7. Troop Ceiling

Within the troop ceiling, planners coordinate troop requirements to achieve a balanced force that can perform the mission. Troop ceilings are fixed limits of troop strength. Therefore, a change in the requirements of one agency requires adjustments among other agencies. When a change has

been justified, as a result of detailed planning, the Department of the Army may change a troop ceiling.

4-8. Phases of Troop Planning

Troop planning has the following three phases: estimation, calculation, and modification. The first phase requires few, if any, tangible figures. Each successive phase uses more accurate planning data until a balanced, sound troop list evolves. Fast-moving warfare often requires merging various aspects of the three phases. FM 101-10-1 contains a description of the three phases.

4-9. Designing the Combat Service Support Structure

a. The company generally is the basic organizational unit for combat service support organizations. With few exceptions, there are no fixed organizations above this level. Normally, the company is self-sufficient in that it possesses the necessary organizational administrative and logistic capability. Companies can provide elements to support units for short periods of time. Cellular detachments and teams provide special capabilities when required and receive any organizational support necessary from the larger units to which they are assigned or attached. Units are organized to function, to the maximum degree, in either the combat zone or the communications zone. Headquarters units serve as command and control elements for assigned and attached units that are selected in the required number and with the necessary capabilities to best meet the operational situation.

b. Flexibility in combat service support organizations is essential to meet the full range of tasks that may arise. Using the company as the basic unit, the troop planner designs the combat service support structure to accomplish the support mission in the most efficient and responsive manner. Use of company-sized units in this manner is known as the "building block" principle and is a fundamental technique in developing combat service support organizations.

c. An important application that illustrates the building block principle is found in the support brigade. Support brigade operations, organization, and capabilities are the composite of the combat service support activities performed by the separately organized TOE units that may be assigned or attached. In general, each of the various headquarters, companies, detachments, and cellular or-

ganizations is designed to perform a given workload in specific areas of combat service support. These separate units, with proper adjustment to insure self-sufficiency, can be used to support organizations of less than division size. Battalion, group, and brigade headquarters are added when the combat service support structure expands. Examples of support brigade flexibility are given under each of the typical support missions of the support brigade that follow in (1) through (4) below:

(1) As part of a field army support command, the support brigade can function to support a corps (as a corps support brigade) or troops in the field army service area (as an army support brigade). The organization of the brigade can be varied to respond to the needs and size of the supported force. Different organizational arrangements for the field army and corps require that the support brigade structure be varied accordingly.

(2) As a corps support command, the corps support brigade serves as the nucleus for the COSCOM. For a separate corps corresponding in status to a field army, the brigade assumes the role of FASCOM, by adding medical, transport, and specialized units of the army support brigade. Civil affairs and military police units may also be added. For an independent corps corresponding in status to a theater army, units normally employed in the theater base or communications zone are added to the COSCOM of a separate corps.

(3) As a division support brigade, the sup-

port brigade can be structured to support a separate or independent division. The support brigade structure for a separate or independent division parallels that described above for the separate and independent corps.

(4) In support of a task force, the support brigade is structured to provide the combat service support, required by the task force. The brigade is normally assigned or attached to the task force headquarters, and is under the operational control authority of that headquarters. Missions to support units outside the task force are received through command channels.

d. The building block principle illustrated above for the support brigade represents the general approach to be used by the troop planner in developing any combat service support troop list. Example troop lists are found in FM 54-3, and FM 54-7.

4-10. Changes in Troop Lists

An organization designed to meet specific requirements often needs modification as operations progress or as plans further develop. It may become necessary to add new units and delete old ones, or units may require additional personnel and equipment. Such requirements dictate the submission of modification tables of organization and equipment (MTOE) and tables of distribution and allowances (TDA) through command channels (AR 310-49).

Section III. BASE DEVELOPMENT PLANNING

4-11. General

a. Base development is the acquisition, development, improvement, and expansion or rehabilitation of facilities and resources of an area or location for the support of forces employed in military operations, deployed in accordance with strategic plans, or provided for in contingency plans. The Joint Chiefs of Staff may authorize base development during peacetime or require planning for construction after the onset of hostilities.

b. A commander is assigned the mission of planning and executing military operations in consonance with national strategic objectives. He prepares operation plans (OPLAN) in accordance with policy guidance and mission directives issued by the Joint Chiefs of Staff. An essential element of the OPLAN is the base development plan

(BDP) which is prepared as an appendix to the logistics annex. The BDP is developed concurrently by the unified command and the component commanders. The BDP becomes the governing instrument for base development in support of the OPLAN.

c. The theater commander may assign responsibility for development of a base to the commander of the theater service component that has predominant interest.

d. The purpose of base development planning is to determine facility requirements to support operations in an actual or potential area of operations; to identify the facilities that are available and which resources can eliminate deficiencies; and to establish a program for providing the required facilities and operating personnel to support the mission.

e. Base development planning parallels operational planning for potential areas of operations. In long range planning, combat service support requirements may necessitate the acquisition of base areas overseas to insure support of initial deployment of combat forces and to provide facilities for stockpiling supplies to support initial combat operations. Success or failure in acquiring rights to overseas bases may influence operational plans.

f. United States forces may be part of a combined command under plans that the combined staff of a standing treaty organization prepares. Base development plans must consider the combined plan, as well as agreements regarding combat service support of or by Allied forces. It must also consider the resources and support capabilities of Allied nations in whose territory operations may be conducted.

g. Base development in an area of operations may start prior to or concurrent with the initiation of combat operations.

(1) Prior to the initiation of combat operations, development of the base may begin in anticipation of hostilities and the requirement to deploy combat forces. Measures include establishment of supply stockpiles and deployment of combat service support forces in sufficient numbers to maintain stocks and support the initial deployment of combat forces.

(2) Concurrent with combat operations in an area, there may be sequential development of division, corps, and field army base areas and establishment of a communications zone when there is sufficient territory for the designation of a field army rear boundary.

h. The base development plan, when approved—

(1) Informs all concerned of the commander's intent in the construction and operation of the base.

(2) Provides a basis for determining the number, kind, and dates of arrival of troops to construct and operate installations in the base.

(3) Provides a basis for theater supply agencies to requisition and ship supplies, equipment, and troops in the proper amount, and provides the priority to build and equip the base.

(4) Schedules, in order of priority, the construction of base facilities.

(5) Establishes operational dates for such key facilities as communications centers, depots, and hospitals; and for airfields, water terminals and other transportation facilities.

4-12. Planning Procedures

Detailed base development planning procedures and a format for a base development plan is contained in FM 31-82.

Section IV. REAR AREA PROTECTION PLANNING

4-13. General

a. The rear area is the geographic space within a command where the bulk of combat service support functions are performed. In the corps, it is the area behind the division rear boundary. The rear area of the field army (field army service area) is that portion of the field army area between the corps rear boundary and the field army rear boundary. The rear areas normally are—the division rear, corps rear, field army service area, and the COMMZ.

b. Rear area protection (RAP) includes rear area security and area damage control. Rear area security/area damage control calls for a distinct set of highly objective, physical acts designed to bring about security in the rear. Rear area protection is even broader in scope, however, and requires the interjection of subjective political considerations into this total field. Accordingly, "rear

area protection" is now used rather than the combined terms "rear area security/area damage control."

c. The purpose of RAP is to prevent interruptions to combat support and combat service support operations. Rear area protection measures include those actions taken to prevent, neutralize, or destroy enemy attacks on units, activities, and installations in rear areas.

d. The commander exercising area control is responsible for protecting the resources in his area from interruptions caused by enemy activities or natural disaster. He is not responsible, however, for providing local defense, air defense, or defense against major enemy actions.

4-14. Planning Considerations

a. Problems in RAP generally develop as tactical forces advance, leaving large unprotected

areas which threaten the security of support units remaining in the vicinity. Upon completion of combat operations in any given area, enemy organizations may be formed to threaten support activities. The execution of RAP missions demands that planning be aimed at countering the worst possible threat. The density and fluidity of troops forward of the corps rear area generally preclude the opportunity for extensive enemy guerrilla or partisan activities. Thus, the primary attempt for irregular decisive results may be expected farther to the rear; the possibility of an attempt increases as lines of communication are extended and friendly troop density is lessened. It might also be expected that with the increased mobility of conventional forces and their ability to conduct deep airmobile and airborne penetrations, the number of enemy conventional forces operating deep in friendly rear areas will increase. The following precepts should guide all RAP plans:

(1) Plans must be kept as simple and as general as possible.

(2) Only the minimum number of plans should exist; a voluminous number of plans creates delay and confusion.

(3) Plans should be oriented toward the most effective utilization of support units. Employment for RAP purposes is a responsibility of the designated area commander.

(4) Plans must consider personnel and equipment authorizations under TAADS and actual resources available. The effectiveness of RAP units is influenced significantly by current troop strength and equipment availability.

b. Area commanders plan for the employment of tactical resources when the effect of enemy rear area activities is beyond the limited capabilities of available RAP resources.

4-15. Planning Sequence

a. The first RAP action is to determine the threat and plan local security measures. Of paramount importance is to plan for the security of newly established bases. The problem can be somewhat alleviated by augmenting military capabilities with local or indigenous security forces such as police or local militia. Additionally, police and security forces of a country by their very nature provide an intelligence source stemming from all levels and orders of the society. Their daily contacts and observations coupled with an extensive knowledge of the area of operations

provide an important source of intelligence for RAP planning.

b. The CSS operational requirements are not always compatible with security requirements. Supporting units need a good road net, ready source of labor, and storage areas and other facilities which are available in established commercial areas; however, such placement decreases the security capability. The best site, from a security standpoint, is in a cleared area occupying high ground, with sufficient vegetation to conceal positions of the facility from observation. The worst site is a congested or jungle area where observation from a friendly base is extremely limited. A poor practice is to occupy the low ground with a large road net. However, nuclear warfare favors terrain offering cover from blast. The risks involved in occupying low ground, therefore, must be evaluated in the light of the advantages gained.

c. Prior to occupying a site, a review is made of all available intelligence about the general area. The military intelligence (MI) group(s), counterintelligence, assigned on the basis of one per TAACOM provides intelligence support in the COMMZ; a MI company, counterintelligence, is assigned to each area support group; and the MI company, counterintelligence, provides support on an area basis in the FASCOM. Intelligence is also available through such sources as indigenous engineers, cross-country trafficability studies, topographical maps, local police, and Allied forces.

d. The continuous monitoring of plans is essential so that operational adjustments based on experience can be incorporated. If support requirements dictate the occupation of a high-risk area, the responsible commander should select an acceptable, alternate site and make every effort to phase into it as operations permit. Prolonged occupation of a site makes subsequent relocation extremely difficult.

4-16. Planning Responsibilities

a. Rear Area Operations Center.

(1) The rear area operations center (RAOC) is a groupment of functionally oriented personnel trained and equipped to keep the area commander continuously informed of the situation in his area and of the resources available to meet emergencies. A major problem in rear area protection planning is the building of a reaction or security task force, since combat service support units can seldom jeopardize their primary mission to fill this new role. The local RAOC commander must

continually monitor and maintain up-to-date information in tenant and transient units with emphasis on identification of their resources and capabilities for RAP potential. Each unit move, each change in priority or potential, and each emergency precipitates the need for updating and reevaluating the RAP plan and operations order. Once the total area potential is determined and confirmed by coordination, the RAOC develops RAP companies or other suitable elements and organizes them into the overall RAP task force. The organization has RAP planning responsibilities and may provide command and control over forces created to handle RAP problems.

(2) One RAOC is provided to each corps commander assigned to the field army. The corps RAOC operates under the general staff supervision of the corps G3. The corps support brigade commander, as the commander of a tenant unit in the corps area, has the same responsibility to the corps as any other unit commander in that he is responsible for unit or installation security and

damage control. He is provided with a small RAP staff within the Assistant Chief of Staff (ACofS), Security, Plans and Operations Section, to insure compliance and coordination with corps RAP directives and plans. When the corps is operating independently, two RAOC are authorized and function under the staff supervision of the S2/S3 section of each COSCOM support group. In the combat zone, the FASCOM commander is responsible for RAP throughout the field army service area. This responsibility is accomplished through RAOC assigned to each support group S2/S3 section. In the TAACOM, a RAOC is assigned to each area support group (ASG) and operates under the staff supervision of the ASG director of security, plans and operations. Each RAOC is located geographically where it can best accomplish the RAP mission for the respective area of responsibility.

b. Detailed planning responsibilities for base development are contained in FM 31-85.

CHAPTER 5

COMMUNICATIONS

(STANAG 2043, SEASTAG 2043)

Section I. GENERAL

5-1. Basic Considerations

a. A responsibility of command is to provide communications. Communications and military operations are integral and inseparable. The provision and maintenance of communications provide for the effective use of military forces.

b. Communications must be reliable, rapid, and secure.

c. Each commander is responsible for the operation of the communications system of his command and for its efficient operation as part of the integrated communications network.

d. The various communications systems established in a theater of operations are integrated. Except as tactical considerations dictate, services or commands do not duplicate communications systems. When appropriate, a portion of the communications requirements of a command may be met by Defense Communication Agency (DCA)

allocation of communications channels in the systems of another command or service.

e. Various headquarters or installations in the communications zone have organic communications elements capable of furnishing their internal communications.

5-2. Theater Responsibilities

a. The theater commander provides for adequate communications to and between component services and joint forces of his command. The organizational structure of the theater determines the form and extent of the theater communications system. The joint and uniservice responsibilities for communications in a theater of operations are indicated in chapter III, JCS Pub 2.

b. The theater commander, through his assistant chief of staff, communications-electronics (ACSC-E), insures the integration of theater communications facilities and the correlation of operating procedures.

Section II. THEATER ARMY COMMUNICATIONS

5-3. Theater Army Responsibilities

The theater army commander provides communications services to Army elements and to other services and agencies as directed. The theater army assistant chief of staff, communications-electronics, plans and supervises the formulation and implementation of signal plans, policies, and procedures for installation, maintenance, operation, and management of Army communications services in the theater.

5-4. The Theater Army Communications Command

a. The theater army communications command

(TACCOM) will install and operate the theater army communications system (TACS). The basis of allocation of this command is one per theater army. The TACCOM commander also serves as the theater army communications-electronics staff officer. The TACCOM provides internal communications for headquarters and installations in the COMMZ that do not have organic communications elements; e.g., for mission commands and the theater army support command (TASCOM).

b. The theater army commander uses TACS to support U.S. Army forces in the COMMZ; and to interconnect with tactical communications systems forward of field army rear boundaries. Details on TACS are contained in FM 11-23.

5-5. Communications Security

a. It must be assumed that the enemy has the capability to intercept all signal communications. The analysis of such intercept can result in two types of exploitation by the enemy. On one hand, he can study the usage patterns, technical characteristics, and message content to derive communications intelligence (COMINT) concerning combat service support activities. This information, valuable in itself, also provides significant insights into the plans and activities of friendly forces as a whole. On the other hand, the enemy can use this intercepted signal to provide him with electronic warfare support measures (ESM); that is, the technical data base required for conducting electronic countermeasures activities. Disruption or denial of combat service support communications can seriously impair the activities of friendly forces.

b. Communications security is the protection resulting from all measures designed to deny unauthorized persons information of value which might be derived from the possession and study of

telecommunication, or to mislead such persons in their interpretations of the results of such possession and study. Included in COMSEC are cryptosecurity, transmission security, emission security and physical security of COMSEC materiel and information. For details see FM 32-5.

c. Action is taken by the US Army to counteract enemy COMINT and ESM efforts through application of communications security (COMSEC). Communications security is of vital importance at all levels in order to minimize the amount of intelligence that the enemy can derive through his COMINT activities as well as to minimize the amount of technical information derived through his ESM operations. For this reason, personnel involved with signal communications, whether as a primary duty or on an occasional basis, must be thoroughly trained and indoctrinated in approved COMSEC and electronic warfare (EW) procedures. The organizations that provide COMSEC logistics support are discussed in paragraph 3-13b. For electronic warfare details see FM 32-20.

CHAPTER 6

CIVIL AFFAIRS

(STANAG 2055, SEASTAG 2055)

Section I. INTRODUCTION

6-1. General

a. Civil affairs (CA) is a command responsibility and involves the relationship between the military commander and his forces, and the civil authorities and people of a foreign country when military forces are present. Civil affairs operations include advice, assistance, population and resources control, military civic action performed in a friendly country, and military government operations.

b. The primary objective of CA operations is to support military operations by controlling the civil population through the regulation of social processes. Such action minimizes interference by the civil population in the military mission, while gaining maximum local support for the campaign. Psychological operations play an important role in attaining this objective. Other objectives include the furtherance of US national policies and the fulfillment of treaty obligations and those obligations that arise from agreements and policies.

c. The administration of CA is on a functional basis, with sufficient flexibility to fit the special requirements of any area or situation. Included in the areas of specialization are those functions normally related to government, economics, public facilities, control of population and local resources, and sociological institutions. FM 41-10 defines CA functions.

d. The nature of CA operations varies with the type of warfare, the attitudes and status of the population in the area of responsibility, and the requirements of the tactical commander. In limited and general war, CA operations normally support the tactical situation. In stability operations, however, CA may become a primary mission of the military force because the ultimate objective is to gain the support of the populace

for its government. Civil affairs input, with emphasis on execution, must be part of the planning for every military operation. Military planners consider the inherent capability of every Army unit to conduct CA operations. Planning provides for the employment of CA specialists and units to augment and support this inherent unit capability.

6-2. Civil Affairs Authority and Responsibilities

a. In JCS Pub 2 are set forth the authority and responsibilities of the US Department of State, the Department of Defense, and other government departments concerning CA.

b. A military commander's CA authority depends on the military mission and the relationship of the government concerned to the United States. The authority the commander exercises conforms to US national policy, the law of land warfare, treaties, and international agreements. The authority to establish the military government phase of CA arises from the international laws of war, which give the occupying power certain rights and responsibilities.

c. Each commander of a unit of the US Armed Forces is responsible for—

(1) Complying with the laws of the United States, international law to include treaties and agreements to which the United States is a signatory, customary law, and the law of the country concerned.

(2) Performing such missions in the field of CA as he may be directed.

(3) Using appropriate CA units and personnel, except as otherwise directed, to secure necessary assistance, supplies, and facilities from local sources and to deal with local civilians and governments on his behalf.

Section II. COMMAND AND STAFF RELATIONSHIPS

6-3. General

a. Theaters of operations in most cases employ joint or combined organizational structures. Control and coordination of CA matters are at the highest level consistent with military requirements. Details of the CA units, organization and employment are contained in FM 41-10.

b. When US diplomatic representatives are in the area, Executive orders usually delineate the relationships between the theater commander and the diplomatic representatives.

c. When US diplomatic representatives are not in the area, the senior US military commander normally has authority, within US national policy, as outlined in paragraph 6-4.

6-4. Theater (US Forces)

When directed, the theater commander advises and assists or exercises a specified degree of control over civil populations, their governments,

economies, and institutions. In the conduct of CA activities, the theater commander—

a. Plans for and conducts CA operations as appropriate. His activities are in accordance with guidance, policies, plans, and operational instructions of the Joint Chiefs of Staff.

b. Secures CA units and personnel required to execute his plan in the same manner that he secures other forces.

c. As required, obtains a political adviser on his staff from the US Department of State to advise on implementation of established policy and to provide liaison with the US Department of State.

d. May delegate authority for CA matters to one of the service commanders in the area, unless he elects or is directed to retain this authority. When CA authority is delegated, normally the Army component commander will be designated for this task with the option of further delegating the function to the TASCOC commander.

CHAPTER 7

INTELLIGENCE

(STANAG 2033, 2044, 2084; SEASTAG 2033, 2044, 2084)

7-1. General

A theater army military intelligence (MI) group; an MI group, counterintelligence, assigned to the theater army area command (TAACOM); and MI battalions assigned to the field army provide MI support to combat service support units in a theater of operations. The type and quantity of MI support required in the theater are contingent on theater army's mission, employment, and assigned geographic area of responsibility. The intelligence support provided at theater army level is in addition to the internal intelligence capabilities of the TASCOT, ENCOM, subordinate combat service support forces, and their normal MI attachments. This includes all support that must be available at the echelon above field army.

7-2. Intelligence Support

Theater army provides those intelligence and intelligence specialist support services that are beyond the organic capabilities of its subordinate commands, or those services that it can centralize more effectively and efficiently. Subordinate com-

mands retain those intelligence responsibilities and resources that are essential to their missions and those whose response time would be attenuated to a degree constituting an unacceptable risk.

a. The TASCOT, using the resources of its mission commands and the MI group, counterintelligence, of the TAACOM, as collection agencies, produces and distributes intelligence of immediate concern to units in the communications zone. The combat intelligence produced in the field army also has wide distribution in the theater.

b. The ENCOM using assigned topographic units and information gathered by corps and army engineer units produces and distributes military engineering intelligence to theater army.

7-3. Military Intelligence Organization, Theater Army

The MI group (theater army) is organized under TOE 30-40 to provide military intelligence specialist support to the theater army headquarters

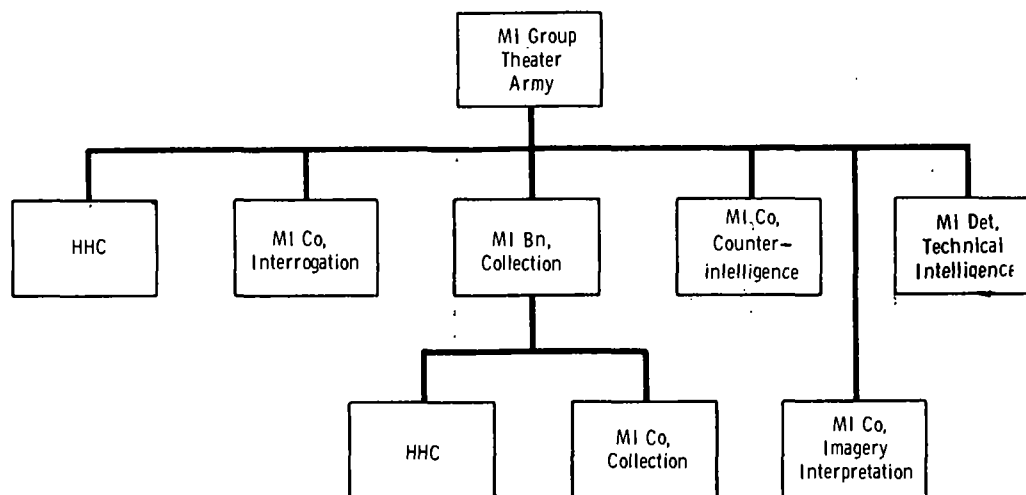


Figure 7-1. Typical military intelligence group, theater army.

and the TASCOM and TAACOM headquarters as required. Figure 7-1 shows the organization of the MI group, theater army. Those units that normally comprise the group are discussed in *a* through *g* below:

a. The MI group headquarters and headquarters company provides the normal command, control, and support personnel in the employment of operational elements of the group.

b. The theater army headquarters staff support section may contain specialists for strategic intelligence, order-of-battle production, censorship, intelligence collection, counterintelligence, and technical intelligence. These personnel operate in the theater army G2 staff section.

c. The imagery interpretation detachment processes imagery provided the G2 by the tactical air force (TAF). This detachment is normally near theater army headquarters, but it may be located at reconnaissance airfields. Theater army normally uses the imagery interpretation reports prepared by this detachment in long range plans and studies.

d. An interrogation detachment from the interrogation company is at each of the PW inclosures in the TASCOM area and provides reports on selected PW in response to specific requirements levied by the theater army G2. The field army G2 may also request interrogation of selected PW found to be knowledgeable in matters pertaining to the field army after evacuation from the field army area.

e. The technical intelligence company provides examination, analysis, and reports on enemy materiel collected and evacuated by tactical units to designated collection points. To perform its mission, this company must have access to medical equipment and chemical laboratories. The general support and equipment section of the evaluation and analysis platoon, technical intelligence company, has two primary areas of interest: logistics intelligence; and chemical, biological, and radiological technical intelligence.

(1) The primary objectives of logistics intelligence are to provide:

(*a*) Intelligence on enemy supplies and resources. Specific areas of interest are subsistence, individual clothing and equipment, general supplies, petroleum, maintenance, and services such as graves registration, laundry, and bath.

(*b*) Intelligence to the field army, based on immediate exploitation of materiel and informa-

tion acquired, as may be significant or contributing to the immediate tactical mission.

(*c*) Information and materiel for exploitation at theater or CONUS level.

(*d*) Information on which to base estimates of necessary logistical support to the population of the area of operations.

(2) Technical intelligence analysis of enemy logistics support must include consideration of enemy economic factors (e.g., food, agriculture, and industrial production), the enemy labor force, and enemy technological capabilities. In this regard, close coordination between technical intelligence and strategic intelligence elements at field army is imperative.

(3) Examination of captured items must be continuous and must include consideration of the applied sciences which made development of the item possible. Increase, decrease, or change in a nation's equipment and/or supplies gives indication of a change in that country's logistics support capabilities. All analyses must be made with consideration of the social and cultural environment of the country concerned.

f. The counterintelligence company provides counterintelligence support to the command and conducts counterespionage, countersabotage, and countersubversive operations within the command as well as normal counterintelligence services for the theater army headquarters and its assigned units.

g. The MI battalion, collection, fulfills special theater army intelligence requirements that cannot be obtained through other collection means. It augments the effort of the MI company, collection, organic to the field army MI battalion.

h. The relationship of the theater army MI group with other theater army and component commands is described in (1) and (2) below.

(1) The theater army MI group operates in direct support of theater army headquarters and in general support of the MI battalions assigned to the field army and the MI group, counterintelligence, TAACOM. If the theater commander establishes joint intelligence facilities, the theater army MI group can provide intelligence support to the Army element of such joint facilities.

(2) The theater army MI group coordinates closely with comparable intelligence units of component commands to provide for timely exchange of intelligence information, consolidation of appropriate operations, and elimination of conflicts

and duplication. The MI group, theater army, exchanges liaison personnel with the MI battalions in the field army to insure close coordination of operations and to permit orderly transfer of coun-

terintelligence operational cases. The group also exchanges liaison personnel with the MI group, counterintelligence (TAACOM), to coordinate counterintelligence operations.



PART TWO

LOGISTICS

CHAPTER 8

LOGISTICS—GENERAL

(STANAG 2135)

8-1. General

a. The objective of logistic support is the timely provision of adequate supplies and services to all elements. In order to continue to attain this objective in the future, the Army is implementing a Standard Army Logistics System (SALS) that will provide for compatible wholesale, Army in the field, and CONUS installation logistic systems utilizing ADPE. The SALS, when complete, will encompass all major logistics functional systems (supply, maintenance, transportation, facilities, logistics support service, and readiness) for each echelon of the Army.

b. Logistics is the science of planning and carrying out the movement and maintenance of forces. In its most comprehensive sense, the logistic aspect of military operations deals with—

(1) Design and development, acquisition, classification, storage, movement, distribution, maintenance, evacuation, and disposition of materiel.

(2) Hospital construction and augmentation of medical resources for evacuation of patients.

(3) Acquisition or construction, maintenance, operation, and disposition of facilities.

(4) Acquisition or furnishing of services.

c. Logistic functions in theaters of operations are supply, maintenance, transportation, construction, hospitalization and evacuation and other services.

d. General principles governing establishment and operation of the logistic system in theaters of operations include—

(1) Minimum number of items on the theater authorized stockage lists and prescribed load lists.

(2) Routine use of economic airlift.

(3) Intensive inventory management.

(4) Minimum handling of supplies.

(5) Minimum supply, maintenance, and service installations.

(6) Maximum dispersion of logistic installations and units consistent with the tactical situation, logistic support requirements, control, and security.

(7) Maximum use of existing facilities, local supplies and utilities, captured materiel, civilian personnel, and prisoners of war.

(8) Maximum economy of resources.

(9) Maximum use of alternate routes.

(10) Optimum use of mobile maintenance teams.

8-2. Logistics Readiness

Commanders at all echelons will assign specific staff responsibility for coordination and supervision of logistic readiness functions to a senior individual or the chief of a staff element of a command (AR 11-14). Normally, the deputy commander will have the delegated authority and a logistic readiness officer (LRO) will execute the logistic readiness program within the TASCOC. He coordinates information, advice, assistance, liaison, guidance, training, instructions, directives, and inspections related to logistic readiness. He will also arrange for or provide personnel to perform as logistic readiness expeditors to assist in overcoming temporary logistic readiness problems, particularly problems concerned with the logistic readiness of the supported force. In all logistic readiness actions, the LRO coordinates closely with the other elements of the staff, particularly with the ACOF, materiel. LRO also are

found in the MATCOM, TAACOM, area support groups (ASG), and FASCOM.

8-3. Logistic Support of Combat Operations

The battlefield will probably be the scene of highly fluid combat operations that could present extraordinary logistic problems. Such operations, combined with use of mass-destruction weapons, will require increased emphasis on one or more of the following procedures:

- a. Maximizing use of all transportation assets.
- b. Reducing the allocation of supplies for some forces to insure an adequate supply for forces engaged in more crucial operations.
- c. Diverting logistic units from low-priority tasks to support the main effort.
- d. Positioning supplies to support detached or withdrawing forces.
- e. Regulating and controlling movement of supplies and troops across major obstacles.
- f. Providing increased security for logistic installations and lines of communication.
- g. Keeping supplies mobile.
- h. Redistributing uncontaminated supplies and equipment promptly—particularly vehicles—of ineffective units.
- i. Using local resources to the maximum permitted by the laws of land warfare.
- j. Establishing priorities to insure availability of transportation for the most urgent requirements.

8-4. Logistic Support of Special Operations

Operations in mountains, jungles, deserts, snow, and extreme cold; and airborne, airmobile, amphibious, and riverine operations may require modification of normal logistic procedures. The procurement of specialized equipment to support these special-type operations may involve long leadtimes, which, in turn, create a requirement for long range estimates and expedited processing. When necessary, major commanders may request operational projects (AR 725-65) for stockage of supplies and materiel in the theater or the continental United States for the purpose of supporting specific operations, contingencies, or war plans for a specific geographic area.

- a. Operations in jungles, snow, and extreme

cold require specialized equipment and modification of normal distribution, storage, and evacuation procedures because of extreme weather effects and restricted lines of communications. Operations in mountains may rely heavily, or altogether, on aircraft, men, and animals for transportation. Environmental effects on personnel and equipment emphasize and increase the difficulties of performing maintenance.

- b. Desert operations present problems in water supply. The accumulation of sand in equipment hampers operations and, together with wide daily temperature ranges, creates unusual supply and maintenance problems.

- c. Amphibious operations require close Army, Navy, and Air Force coordination in establishing and maintaining logistic support of forces ashore (FM 31-11 and FM 31-12).

- d. In airborne operations, airborne force commanders are responsible for logistic support that accompanies assault forces. The TASCOC assists in mounting an airborne operation and provides logistic support during the operation, including followup supply. Normally, this support is provided by the area support group of TAACOM in whose area the marshaling site for the airborne operation is located. To accomplish this support, the area support group must be augmented to provide an airdrop capability, communications between the marshaling site and appropriate elements of the area support group, medical support for the operation, and direct support ammunition supply for the airborne force. The area support group delivers supplies to airfields for Air Force delivery to forces in objective areas. After surface linkup, normal supply procedures are applicable (FM 57-1 and FM 61-100).

- e. Airmobile operations require detailed logistic planning. Planners give special consideration to the numbers and types of aircraft available for supply missions as well as to the stocks of fuel and ammunition needed for resupply.

- f. In riverine operations, the established principles of combat service support for the major combat units (divisions, corps, and field armies) are applicable. With some variations, the logistic techniques, procedures, and organizational concepts governing support of ground and airmobile operations also apply. The basic peculiarity of riverine operations is the extensive use of ships and watercraft for all types of logistic support. Combat service support of a riverine operation is

primarily support of land and afloat bases and support of operations launched from these bases. Contained in FM 31-75 are details on riverine operations, including combat service support. Paragraph 11-18 discusses the use of inland waterways for transportation.

8-5. Logistical Support in Unconventional Warfare and Stability Operations

a. Unconventional Warfare. Unconventional warfare (UW) includes the three interrelated fields of guerrilla warfare, evasion and escape, and subversion. Unconventional warfare operations are conducted within enemy or enemy-controlled territory by predominantly indigenous personnel, usually supported and directed in varying degrees by an external source.

b. Stability Operations. Stability operations are those types of internal defense and internal development operations and assistance provided by the armed forces to maintain, restore or establish a climate of order within which responsible government can function effectively and without which progress cannot be achieved.

c. Logistic Responsibilities. Logistic support of UW and stability operations is the responsibility of the Joint Unconventional Warfare Task Force (JUWTF) or theater commander. Each component service will be tasked to provide appropriate support to the forces involved. These military supplies will be provided under control of the joint command and the military assistance advisory group (MAAG) when assigned to that country. In general, such stores will be provided to the indigenous forces under the Military Assistance Program or similar apparatus with US forces receiving support from the theater logistical system.

d. Logistic Support. Support of the assigned mission is the basic consideration in planning and organizing logistic support of stability operations. Support requirements may range from those necessitated by a variety of combat situations involving either US or Allied forces, or both US and Allied forces; to those involving training in the conduct of military civic action programs. Combat service support units are well suited to support these operations by providing such humane and civil relief services as restoring public works and furnishing food, clothing, and medical treatment. When such support is required, and when the necessary units and supplies are available, assistance of this type facilitates accomplishment of the sta-

bility operation mission. A quick-reaction procurement system will meet requirements for non-standard items through the procurement of commercial items. However, the combat service support system normally provides adequate support for all types of stability operations. The techniques for logistic support in areas separated from organic combat service support units may vary considerably from those used in areas having such support units. These principles and techniques for support are applicable to both US and indigenous forces. Flexibility, responsiveness, and improvisation are key factors and can be accomplished by—

(1) Planning in advance so that units have the minimum essential supplies and equipment consistent with contemplated operations. This is particularly important for operations in remote areas and where adverse weather and climatic conditions are prevalent.

(2) Stocking supplies at echelons below those at which stockage is normally maintained to expedite supply (e.g., at brigade, regimental, or group bases of operations in readily accessible areas and at battalion bases of operations in remote areas).

(3) Making forces assigned to stability operations as self-sufficient as practicable. Payment for food, supplies, equipment, materials, and facilities requisitioned locally for military use avoids undesirable psychological effects. In areas where food or other supplies are scarce, local purchase or requisitioning should be prohibited.

(4) Accomplishing logistic support by air or water when land transportation cannot provide timely support.

e. Host Country Organization.

(1) In many countries, particularly those receiving assistance under the Military Assistance Program, the host country army combat service support system is similar to that of the US Army. In many cases, host country combat service support activities follow the same regulations and procedures as the US Army. United States Army personnel trained and experienced in Army supply concepts and doctrine advise host country forces, and many host country key logistic personnel have studied at Army installations and schools in the United States. Such system similarity acts to increase the effectiveness of US Army combat service support for host country forces, as well as for US forces. Even so, it is not the task of the Army elements to change the host country combat service support system to conform with that used by the United States. Rather, the task is to help

host country forces make their system operate as efficiently and effectively as possible.

(2) Organizational and geographic decentralization of combat service support for military units committed against insurgent forces may be the normal supply procedure in stability operations. The deployment of the command and its

organization for combat will usually dictate modification of normal combat service support structures and procedures to provide effective support of combat operations.

f. Additional Information. Details concerning logistic support of UW operations may be found in FM 31-21.

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CHAPTER 9

LOGISTICS—SUPPLY

(STANAG 2034, SEASTAG 2034)

Section I. GENERAL

9-1. Introduction

a. Supplies are the commodities necessary to equip, maintain, and operate a military command. The Army, Air Force, and Marine Corps divide supplies into general classes for planning and administrative purposes. These classes of supplies are as follows:

- (1) Class I—Subsistence.
- (2) Class II—Secondary items of equipment authorized in allowance tables and items of supply including expendables and consumables.
- (3) Class III—Fuels and petroleum products.
- (4) Class IV—Construction materials.
- (5) Class V—Munitions.
- (6) Class VI—Personal support items (exchange and shipstore type).
- (7) Class VII—Major end items of equipment authorized in allowance tables.
- (8) Class VIII—Medical materiel and repair parts.
- (9) Class IX—Repair parts (less medical) including expendables and consumables.
- (10) Class X—Nonmilitary support materiel.

b. Additional details are contained in AR 11-8 and FM 10-13.

9-2. Basic Supply Terminology

Figure 9-1 illustrates terms used in the planning and control of supply. The terms are defined or explained in *a* through *h* below.

a. Level of Supply. A general supply term used for planning purposes and in the control of supply operations for expressing quantities of supplies or materiel authorized or directed to be held in anticipation of future demands. Levels may be expressed in days of supply or in quantity per item.

b. Operating Level of Supply. The quantities of

materiel required to sustain operations in the interval between requisitions or the arrivals of successive shipments.

c. Safety Level of Supply. The quantity of materiel, in addition to the operating level of supply, required to be on hand to permit continuing operations in the event of minor interruption of normal replenishment or unpredictable fluctuations in demand.

d. Order and Shipping Time. The time elapsing between the initiation of stock replenishment action for a specific activity and the receipt by that activity of the materiel resulting from such action.

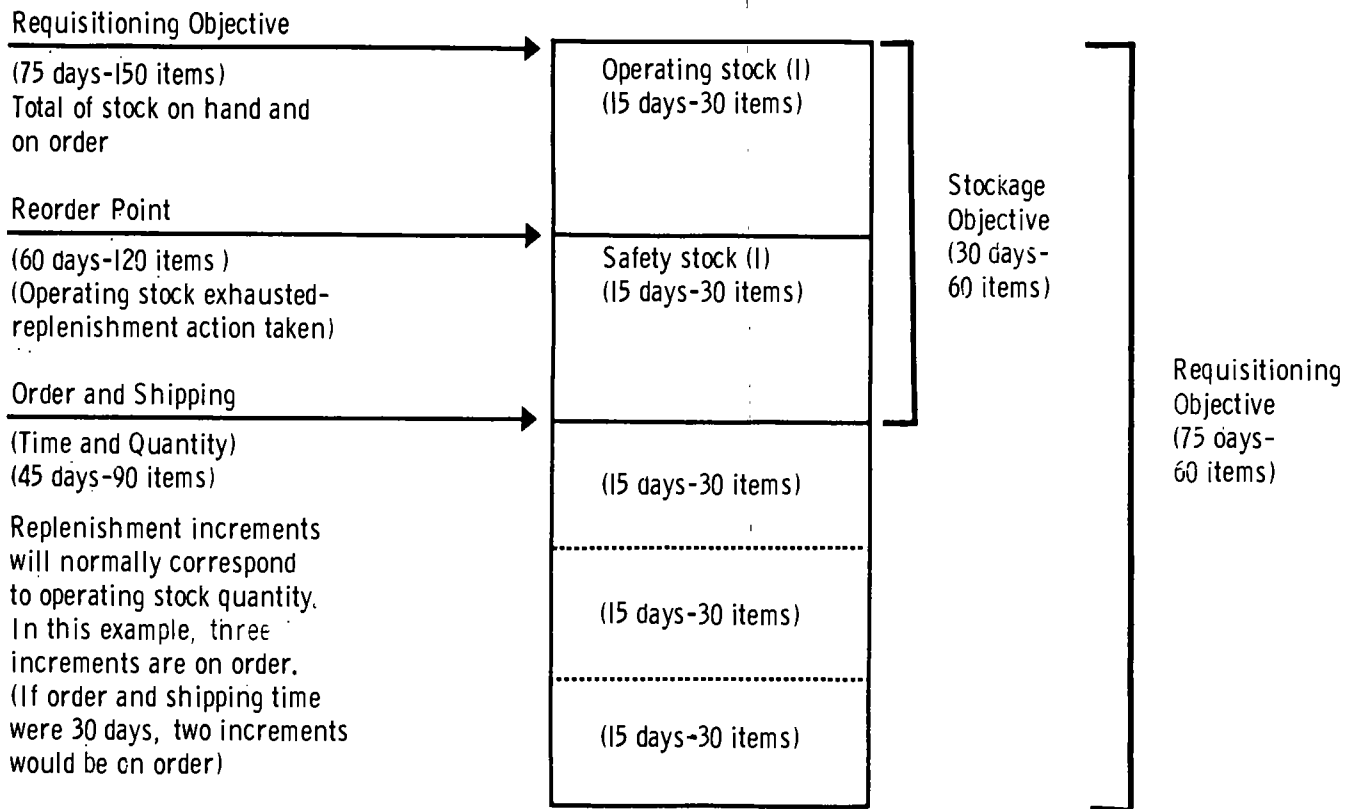
e. Procurement Lead Time. The interval in months between the initiation of procurement action and receipt into the supply system of the production model (excludes prototypes) purchased as the result of such actions and is composed of two elements, production lead time and administrative lead time.

f. Requisitioning Objective. The maximum quantities of materiel to be maintained on hand and on order to sustain current operations. It will consist of the sum of stocks represented by the operating level, safety level and the other and shipping time or procurement lead time, as appropriate.

g. Stockage Objective. The maximum quantities of material to be maintained on hand to sustain current operations. It consists of the sum of stocks represented by the operating level and the safety level.

h. Reorder Point.

(1) That point at which time a stock replenishment requisition would be submitted to maintain the predetermined or calculated stockage objective.



(I), "stock" and "level" used interchangeably.

Figure 9-1. Illustration of levels of supply.

(2) The sum of the safety level of supply plus the level for order and shipping time equals the reorder point.

9-3. Fundamentals of Supply

a. Supply must be responsive in detail, rapid in action, and simple in operation. It must be adjustable to requirements of supported units and capable of satisfying fluctuating demands. The interrelationship of supply and maintenance and their dependence upon each other for successful operations has been covered in the applicable sections of chapter 10.

b. The organization for supply encompasses—

(1) A system for stocking during peacetime for wartime requirements of combat-essential items to insure an automatic supply capability to sustain operations pending the establishment of wartime supply procedures or the reestablishment of normal peacetime supply channels. Theater commanders and the Commander, United States Continental Army Command (CONARC) specify

these combat-essential items in accordance with AR 11-8.

(2) Personnel and facilities to receive, store, maintain, and distribute, issue, and dispose of supplies and equipment.

(3) An action agency at each echelon of supply distribution that responds to requirements by directing issue, calling supplies forward for delivery to user, or placing demands on the higher echelon for action—whichever is most appropriate.

(4) Personnel to plan the supply operation and coordinate or supervise its execution; assign supply missions; and recommend or enforce policies, allocations, and priorities.

c. In the supply operation, automatic data processing equipment (ADPE) is used together with an effective communications system, to compile and transmit supply data and process management information. Additionally, the supply operation includes—

(1) A responsive requisitioning system.

(2) An inventory management system capable of providing current information on the amount, location, and condition of stocks on hand; of balancing current and anticipated requirements against known assets; and of disposing judiciously of excess stocks.

(3) Functionalization of supply in both the field army and the COMMZ.

(4) Close coordination and exchange of information with CONUS support systems and provision for the transition from a peacetime environment to a wartime posture.

(5) Designation of mission to relate supply to other combat service support operations and to facilitate assignment of supply responsibilities to specific levels of command. These designations are—

(a) Direct support (DS) supply, which is the supply support provided to using troops and units. In theaters of operations, DS supply is essentially customer oriented in objective and retail in nature.

(b) General support (GS) supply, which is that support given the supported force as a whole and not to any particular subdivision, thereof. General support is essentially commodity oriented in objective and wholesale in nature.

9-4. Responsibilities for Supply

a. Theater Commander. The theater commander insures that forces in the theater receive adequate supply support. Generally, each military service is responsible for its own supply support, except as otherwise provided for in agreements. The theater commander allocates supplies among the military services when such action is necessary.

b. Theater Army Commander. The theater army commander supplies US Army forces in the theater and supports the US Navy, US Air Force, and other authorized consumers with items as directed. The theater army commander—

(1) Executes his responsibility for operation of the theater army supply system through appropriate major subordinate commanders. He provides broad supply plans and policies for guidance of subordinate commands.

(2) Establishes policies regarding priorities for allocation of resources among major subordinate commands of theater army. Normally, he accomplishes this through policy directives covering the ten classes of supply. He may allocate specific items because of their special nature or critical status.

(3) Arbitrates differences among major subordinate commands with respect to supply support.

(4) Conducts inspections of supply activities of major subordinate commands.

(5) Provides guidance on the troop basis to be supported; normal authorizations; and project and special authorizations, including those for contingency operations and reserve authorizations.

(6) Prepares, maintains, and reviews operational project requirements and recommends their approval to the Department of the Army (DA) (AR 725-65).

(7) Establishes, within authorized theater levels, supply levels for major subordinate commands.

c. Major Subordinate Commanders (Communications Zone).

(1) *Theater army support command commander.* The theater army support command (TASCOM) commander is responsible for supply operations, based on the theater army commander's directives and policies. Except for those supplies for which the Navy or the Air Force has responsibility, the TASCOM commander provides supplies to Army forces in the theater and to such Navy, Air Force, Allied Forces, and civilian activities as directed. The TASCOM commander does not become involved in day-to-day or detailed supply operations. He executes his responsibility for operation of the supply system through the materiel command (MATCOM) and the theater army area command (TAACOM) as outlined below.

(2) *Materiel command commander.* The MATCOM commander is responsible to the TASCOM commander for providing GS supply (less medical, cryptologicistic, water, and maps) to US and, as directed, such other forces in the theater.

(3) *Theater army area command commander.* The TAACOM commander is responsible to the theater army commander for providing DS supply (less medical, cryptologicistic, ammunition, and map supply) to the TASCOM, to units passing through or located in the COMMZ, and, as directed, to other forces.

(4) *Engineer command commander.* The engineer command (ENCOM) commander is responsible for providing topographic and military geographic intelligence products including maps, photographic mosaics and gazeteers to all Army forces and other activities as directed.

d. Major Subordinate Commanders (Combat Zone).

(1) *Army group commander.* Paragraph 3-17 discusses the responsibilities of the army group commander for supply.

(2) *Field army commander.* The field army commander (para 3-18) supplies the field army and, as directed, other forces. He executes his supply responsibility through the field army support command (FASCOM) (para 3-19).

(3) *Field army support command commander.* The FASCOM commander is responsible to the field army commander for supply to field army units. He is primarily responsible for the planning and execution of assigned combat service support missions.

(4) *Corps commander.* The corps commander is in the supply chain of command when the corps operates as a separate or independent corps. Then, a corps support command (COSCOM), as outlined in paragraph 3-22, controls and supervises supply for the corps and supported units as specified by the corps commander. When the corps is part of a field army, the corps commander influences supply in respect to corps troops as indicated in paragraph 3-20c.

(5) *Support brigade commander.* Support brigades are major subordinate commands of the FASCOM. The support brigade commander is responsible to the FASCOM commander for supply to such forces as directed. The army support brigade commander supports units in the field army

service area. Each corps support brigade commander supports divisional and nondivisional units in the corps area. The corps support brigade commander, while under the command and control of the FASCOM commander, maintains constant liaison with the supported corps commander in matters concerning supply and service (FM 54-4).

(6) *Division commander.* The division commander supplies units assigned or attached to his division (FM 61-100). He executes his supply responsibility through the division support command (DISCOM).

(7) *Division support command commander.* The DISCOM commander is the division's principal representative for supply support operations. He is responsible to the division commander for carrying out the supply support plan, as well as assisting in its development (FM 54-2).

(8) *Separate brigade commander.* The separate brigade commander supplies his units through a support battalion which contains the combat service support elements. It provides direct support supply; maintenance; and medical, administrative, and miscellaneous services to all organic and attached elements of the brigade.

(9) *Other commanders.* Commanders of separate Army units supply their own elements and make their needs known to the appropriate supporting supply echelon. They normally obtain supplies in accordance with arrangements made with the appropriate supporting commands.

Section II. INVENTORY MANAGEMENT

9-5. General

Inventory management has been defined as the phase of military logistics which includes managing, cataloging, requirements determination, procurement, distribution, overhaul, and disposal of materiel.

a. The functions of inventory management include:

- (1) Management of supply assets.
- (2) Cataloging which includes item identification, standardization, and item interchangeability/substitution.
- (3) Computation of supply requirements.
- (4) Procurement of required supplies.
- (5) Stockage and distribution of supplies to meet consumer demands.
- (6) Determination of overhaul requirements,

development of programs, and provision of program direction.

(7) Disposal of items when no longer required in the theater.

b. The order of listing of the functions in a above, will not necessarily be applicable in the actual management of an operating system. On the contrary, inventory management encompasses all the tasks listed above in appraising the entire process of supply as an interrelated chain of activities from procurement through distribution or disposal.

9-6. Inventory Control

Inventory control is the process that documents the supply, distribution, reconditioning, and/or disposal of an item of supply. This is done

through a system of reports, computation, and evaluations which allows definitive supply action in the form of budget estimates and procurement, disposal, or allocation. The basic elements of an inventory control system are—

a. Cataloging, which includes the establishment of management control numbers, document records, distribution data, environmental aspects, standardization, and usage data.

b. Distribution, which includes determination of storage location, review of special handling requirements, providing prepositioned materiel receipt, distribution of support items, maintenance of demand data and development of supply control studies.

c. Provision of guidance, requirements, and resources relating to the overhaul/rebuild program.

d. Disposal of excess, surplus, scrap, or salvage property under proper authority. Disposal may be accomplished by transfer, donation, sale, declaration to a disposal agency, abandonment or destruction.

9-7. Supply Control

Supply control is the process by which an item of supply is controlled within the supply system. It includes requisitioning, receipt, storage, stock control, shipment, issue, disposition, identification, and accounting.

a. The supply control system provides a systematic means for maintaining the best possible balance between total supply and demand to insure timely provision of needed materiel, to prevent accumulation of excess stocks, and to determine quantities of stocks available for redistribution or disposal. The system requires that essential data concerning the supply-and-demand status of an item be compiled, kept up to date, and centrally controlled.

b. The basic elements of a supply control system are—

- (1) Supply policies of the command.
- (2) Stock control records and supply reports. (Thus, supply control includes stock control.)
- (3) Forecasts of supply requirements and availability.
- (4) Data on the past, present, and future supply status of individual items.
- (5) A responsive ADP system of sufficient capacity to support operations.

9-8. Stock Control

Stock control is the process by which pertinent data are maintained on the quantity, location, and condition of supplies and equipment due in, on hand, and due out. The objective of stock control is to determine the quantities of supplies and equipment available and/or required for issue and to facilitate distribution management of these items.

a. The stock control system includes procedures by which—

- (1) Requisitions are filled on a timely basis.
- (2) Shortages and excesses in stock levels are discovered and reported.
- (3) Surplus, obsolete, unserviceable, and salvage items are located and reported.

b. The timely placing of requisitions and aggressive followup action is necessary to maintain stock levels. If stock levels fall below the safety level, command action must be taken to provide essential requirements. It may be necessary to ration or regulate items in short supply.

c. Stock control efficiency depends on rapid and accurate posting and review of central stock control records; audit of installation records; accurate inventories; and inspection, assistance, and instruction throughout all commands. Use of ADPE provides a capability to simplify operations, initiate management by exception techniques, and provide realtime data. These additional capabilities will enable managers to expand the number of items under closed loop/selected item management system control to the maximum level consistent with cost effectiveness.

d. Whenever supply levels of a command appear either inadequate or excessive, the commander recommends revision of the prescribed supply level.

9-9. Selected Item Management System

In order to provide greater visibility and control over supplies, the Department of the Army implemented the selected item management system (SIMS), the objectives of which are to—

- a. Determine more exact materiel requirements.
- b. Improve the budgetary process.
- c. Provide maximum support with minimum investment level.
- d. Improve positioning of assets.

e. Control excess through redistribution actions. The items selected for intensive management within the SIMS program account for approximately ninety percent of the Army's dollar value of annual demands, and include all critical and essential items regardless of the dollar value (DA Pam 710-13).

9-10. Theater Army Support and Command Inventory Management

The materiel management center of the MATCOM provides integrated inventory management for the theater army stocks in the COMMZ. The automatic data processing center (ADPC), an organization separate from the MMC, provides automatic data processing (ADP) service for the MMC. The ADPC makes logistic information readily available and permits responsive action. Computer facilities supporting the MMC may process management data pertaining to the United States Army Security Agency (USASA), Defense Supply Agency (DSA), Theater Army Communications Command (TACCOM), Defense Communications Agency (DCA) (Theater), and medical items. To facilitate highspeed supply transactions, the MATCOM MMC connects electronically to CONUS national inventory control points (NICP), the TAACOM and FASCOM MMC, the TRANSCOM movements control center (MCC), and COMMZ depots and storage activities.

a. The MATCOM MMC, using the facilities of the ADPC, collates, analyzes, advises, and distributes complete and current information on all supply transactions and associated data. In performing its mission, the MCC—

(1) Computes theater requirements on the basis of accumulated demand data, troop strength, item density, and other guidance from the MATCOM. Computation of requirements subsequently results in requisitions to CONUS, procurement in the theater, and repair of unserviceable items for return to stock.

(2) Directs procurement by providing field procurement detachments with pertinent data on items and quantities required and by performing such actions as may be necessary in support of the procurement functions of the MATCOM.

(3) Directs distribution and positions supplies in field depots in accordance with the approved distribution plan.

(4) Directs cataloging by maintaining and providing subordinate elements such catalog data

information as Federal stock number changes, unit of issue changes, and end item and component identification.

(5) Directs disposition of excess items and scrap and identifies items that need to be recovered from salvage for repair and return to stock.

b. While the MMC directly or indirectly influences the activities of operating supply units, it is not in the chain of command. Commodity managers in the MMC review machine actions and interpose human judgment whenever necessary. They make determinations or recommend actions that are not adaptable to routine machine solution and insure that the ACofS, materiel, possesses timely and accurate information on which command decisions can be based.

c. The establishment of the MATCOM, with its functional MMC, does not relieve the TASCOM commander of responsibilities for combat service support. The TASCOM commander is responsible to the theater army commander for executing most of the combat service support provided in the COMMZ. Establishment of the MATCOM emphasizes the direction of general staff activity pertaining to combat service support. At theater army, interest is in overall broad policy guidance; at the TASCOM, in detailed planning and execution; and at the MATCOM, in control of GS supply and maintenance.

9-11. Field Army Support Command Inventory Management System

The FASCOM inventory management system consists basically of three echelons—an inventory element at the GS supply and storage location, an MMC at the support brigade, and an MMC at FASCOM headquarters.

a. Operationally, the system is predicated on decentralized inventory locations and centralized inventory management activities, which are provided ADP services and electronic communications facilities.

b. A minimum of records is maintained at the GS supply storage location. These records consist of locator files and shipment records.

c. The brigade MMC meets demands from supported units by directing shipments from any source under brigade jurisdiction or by referral to the FASCOM. The MMC makes recommendations concerning levels of supply and additions to or deletions from authorized stockage lists. It fore-

casts and determines support brigade requirements and provides, as necessary, specified stock records support activities as outlined in Army field stock control regulations. A common computer complex services the MMC and other functional control centers. This promotes centralized control of all supply support in the corps and army support brigades and enhances the response to demands of supported troops. The support brigade commander thus has control over his assets as well as his operating units.

d. The FASCOM MMC is the heart of the FASCOM supply management system. It provides inventory management for all classes of supply (less medical, cryptologic, map, water, construction and RPMA) for which the FASCOM has jurisdiction. The MMC uses electronic equipment to process and transmit supply and stock control information.

9-12. Alternate Methods of Control

Automatic data processing is neither subordinate to nor a substitute for effective supply. The equipment serves as a tool of management, not as its replacement. System and service must be mutually supporting to attain the common objective.

a. Designation of the TAACOM ADP facility as an alternate provides for continuing MATCOM ADP functions in case of emergency. The TAACOM facility receives periodic summary data and records in sufficient detail to permit it to assume the MATCOM ADP supply function if necessary. Field depots and the staff of the MATCOM ACoS, materiel, provide personnel to establish an alternate MMC, if required.

(1) If alternate ADP facilities are not available, scheduled periodic printouts previously provided storage sites by the MATCOM ADPC can be used for short periods in a manner similar to the manual stock record system. Under these cir-

cumstances, requisitions that come from the FASCOM MMC and from COMMZ units go to the field depots as determined by the ACoS, materiel.

(2) To insure continuing supply under all contingencies, planning at MATCOM headquarters provides for measures to be taken if there is a disruption in communications among the MATCOM MMC, the FASCOM MMC, field depots, or TAACOM units. Such measures normally consist of emergency shipments of established quantities and types of supplies from field depots. Requirements can go by airmail or air courier if communications between the MATCOM MMC and NCP are disrupted.

b. To insure continued and uninterrupted management in the field army, there is a completely integrated system of alternate capabilities as follows:

(1) The FASCOM MMC can temporarily assume the functions of any one brigade MMC.

(2) Except for class V supply, the army support brigade MMC can temporarily assume the functions of the FASCOM MMC. For class V supply, the MATCOM MMC serves as the alternate for the FASCOM MMC.

c. In the event of complete system disruption, requesting organizations go directly to the storage locations rather than to the MMC. In general war, there may be situations in which contact with combat units and forward supply units is broken for sufficient time to warrant emergency resupply. In these situations, the GS units in the field army service area or forward field depots in the COMMZ automatically ship predetermined survival supplies to affected forward areas, based on directives from the FASCOM or the MATCOM MMC. Further, if storage locations fail to receive shipping directives from MMC for a specified period of time, there is automatic shipment of items on predetermined lists.

Section III. REQUIREMENTS

9-13. General

Supply requirements are statements of the need for specific quantities of supplies and equipment for specific periods of time or at specified times.

a. Supply requirements are classified in accordance with the need that each is intended to satisfy. The classifications and criteria for establishing them are shown in (1) through (4) below.

(1) Buildup supply requirements provide for initial issue of supplies.

(2) Replacement and consumption requirements keep initial equipment at authorized quantities and replenish supplies consumed, expended, lost, contaminated, or destroyed.

(3) Reserve requirements are necessary to meet emergency needs (AR 11-8 and AR 11-11).

(4) Operational project requirements author-

ize major commanders additional supplies and equipment for the purpose of supporting specific operations, contingencies, or war plans for a specific geographic area.

b. In the theater of operations, commanders must know their authorizations for supplies and equipment and the quantities on hand as a basis for requisitioning and planning. To insure availability of proper types and adequate quantities of supplies for current and projected operations, the TASCOM staff requires information on strategic and tactical plans as far in advance as possible. The FASCOM staff also must know the kinds and quantities of supplies planned for procurement or available for projected operations.

c. In initial stages of mobilization, supply requirements represent, for the most part, needs for initial buildup. In later stages, most requirements represent needs for replacement and replenishment (resupply). The Department of the Army bases its computation of these supply requirements on the forecast of troop deployment, theater stockage objective or supply levels, theater replacement factors, and consumption rates. Theater army commanders must forecast their own requirements at the earliest possible date, as obtaining supplies on a large scale may require a leadtime of many months.

d. Staff planners develop the gross tonnage estimate of supply requirements. This estimate provides the basis for other important planning considerations, such as transportation, troop, and construction requirements.

9-14. Buildup Supply Requirements

a. Basis for the determination of buildup supply requirements are current tables of organization and equipment (TOE), tables of distribution and allowances (TDA), additive operational projects (described in AR 710-1), and similar authorizations. Compilations of these requirements help determine replacement, consumption, and reserve requirements.

b. In an oversea command, accurate computation of buildup supply requirements depends on a knowledge of—

- (1) Troop basis and allowance authorizations under which the troops and installations are to be supplied.
- (2) Status of supplies in the hands of troop units.

(3) Dates of arrival or activation of troop units.

(4) Civilian supply requirements.

c. Computation of requirements and determination of shortages are staff functions. Commanders and staffs must provide the appropriate combat service support organization with such data as troop basis, status of supplies in the hands of troop units, phased arrivals, operation plans, and the period for which computations are to be made.

9-15. Replacement and Consumption Requirements (Resupply)

a. Successful operation of an organization demands that supplies be available when needed. When supplies are received daily, needs can be met with a minimum operating level of supply. When supplies are received less frequently, it is usually necessary to increase levels of supply. Bases for the computation of replacement and consumption requirements are the authorized days of supply levels and the following:

- (1) Projected troop strength for the period.
- (2) Changes in composition of the force supported.
- (3) Seasonal requirements.
- (4) Anticipated operations that create special requirements.
- (5) Revision of replacement factors and consumption rates as a result of additional experience.

b. Determination of daily or periodic replacement and consumption requirements is a staff function. The logistics staff member concerned receives the information affecting requirements in sufficient time to meet demands for contemplated operations. Commanders and staffs are responsible for obtaining necessary experience data from using units to improve the factors used in determining requirements.

9-16. Reserve Requirements

Reserve requirements represent quantities of items in excess of immediate needs to insure continuity of supply. They include supplies prescribed for particular purposes, such as contingency retention stocks and equipment for newly activated organizations. Commanders are responsible for obtaining authorizations for supply reserves and for issuing directives and guidance to the appropriate military service or subordinate

commands for accumulation and replenishment of supply reserves.

9-17. Operational Project Requirements

a. Operational projects approved by DA authorize major commanders to acquire materiel for theater or CONUS stockage for the purpose of supporting specific operations, contingencies, and/or war plans for specific geographic areas. Project stocks are identified as mobilization reserves. Operational projects are of two types, as follows:

(1) Additive requirements, which consist of requirements in addition to the initial issue allowance contained in MTOE, TDA/MTDA, and CTA; and in addition to the levels authorized by AR 11-11. Requirements for indigenous forces are included in this category. Upon approval by the Department of the Army, additive projects increase materiel acquisition objectives by the quantities specified therein.

(2) Nonadditive projects, which consist of prepositioned materiel configured to unit sets (POMCUS) to reequip specific units upon initial deployment to the theater in which materiel is stored or to an alternate theater. Requirements contained in nonadditive projects normally do not increase materiel acquisition objectives. Nonadditive requirements may be added to materiel acquisition objectives, provided it can be shown that these requirements cannot be supported from authorized post D-day consumption reserves or initial allowances not needed by inactive forces until deployed.

b. Operational projects enable planning of mobilization reserve requirements, either as additive or nonadditive supply authorizations. Operational project requirements may originate in a theater or may be part of the Department of the Army plan for a specific operation. Theaters must submit operational project requirements early so that the Department of the Army can consolidate demands of all theaters for orderly and economical procurement and supply. Long procurement lead-times may make it necessary for the Department of the Army to initiate operational project requirements before a theater commander or theater army commander is designated. Operational project requirements so initiated may require revision later, based on theater recommendations.

c. Operational project requirements include lists of materials and shipping schedules, when appropriate. While theaters may prepare complete

lists of materials, the Department of the Army frequently prepares them, based on a general statement of the task to be accomplished. The latter method has advantages, especially where construction is necessary, because technical specialists familiar with design, nomenclature, and sources of materials are usually available in CONUS.

d. The theater army commander's responsibility for operational project requirements includes—

(1) Reviewing Department of the Army authorized operational projects to determine their suitability and to recommend necessary changes.

(2) Determining the need for additional operational projects and, where applicable, obtaining Department of the Army assistance and approval.

(3) Issuing necessary directives to subordinate commanders to obtain needed supplies and to take action to complete the operational project requirement.

(4) Allocating transportation assets made available to him for movement of materials to the theater.

(5) Issuing necessary directives for safeguarding, preservation and control of operational project stocks stored in-theater.

e. Examples of projects that must receive special consideration include—

(1) Fixed signal installations.

(2) Base installations, including depots, shops, assembly areas, port facilities, hospitals, rest areas, military confinement facilities, prisoner of war inclosures, Army exchanges, and postal systems.

(3) Rehabilitation or construction of transportation facilities, tactical and LOC bridging, airfields, petroleum pipelines and related facilities, field fortifications and protective construction, and barriers, camouflage and tactical cover and deception facilities.

(4) Specialized equipment (e.g., helicopter external lift slings) and increased levels of supply needed for special operations.

f. Additional details on operational projects are contained in AR 710-1.

9-18. Levels of Supply

The Department of the Army prescribes levels of supply for theater army in terms of days of supply (AR 11-11). The two broad areas of levels of supply are peacetime operating stocks and war

reserves. Usage factors and experience data vary among different items of supply. It is necessary to convert days of supply to pounds per man per day or to other quantitative units to serve other logistic purposes. Collectively, these levels constitute the stockage objective (para 9-2i) of the command concerned and permit requisitioning, control, movement planning, and associated activities. The theater stockage objective represents the maximum quantities of materiel to be maintained on hand to sustain current operations.

a. The theater army commander prescribes levels for the combat zone and the COMMZ. He may prescribe levels for subordinate commands or delegate such authority to the TASCOT and field army commanders. Factors considered in establishing levels include—

(1) Levels prescribed for the theater army commander by higher authority. These levels represent the maximum stockage authorized.

(2) Supply levels prescribed for the combat zone and the COMMZ.

(3) Locations of subordinate commands.

(4) Order and shipping time between organizations, to include consideration of vulnerability of routes.

(5) Character and relative importance of the combat missions of supported tactical units.

(6) Vulnerability of supply installations.

(7) Estimated reliability of resupply capability.

(8) Estimated wartime requirements for materiel for which increased demand is expected under combat conditions.

(9) Requirement for mobility.

(10) Requirement for civil population.

(11) Availability of local supplies for military procurement.

b. Supply levels at the various theater army echelons are not fixed.

(1) The field army has a low supply level to facilitate required mobility. Normally, the supply level applies to items consumed at a reasonably predictable rate. Stocks maintained in field army supply installations include operating levels of fast-moving items to support daily consumption. Reserve stocks are for emergency issue only. A reserve of end items is normally in dispersed locations to serve as replacements for battle losses and for items that are not within the field army maintenance capability or capacity.

(2) Amounts actually stored at each echelon vary among commodities and items within each

commodity grouping, based on supply actions directed by the MATCOM and the FASCOM. At the GS level, about 70 percent of the supplies in the COMMZ is in rear depots.

c. Increasing the speed with which requisitions are prepared, transmitted, and processed, and increasing the speed and reliability of supply shipments reduce the required number of days of supply in a theater army supply system.

9-19. Stockage

a. *General.* Use of the selective stockage principle, in accordance with AR 710-2 and within criteria established by the theater commander, reduces problems incurred by stockage of large numbers and types of supplies. The selective stockage principle, is, in application, that each echelon stocks items most frequently demanded by supported organizations and relies on responsive support to furnish those items that do not meet stockage criteria. The bases for stockage at each echelon are demand experience, combat essentiality, and estimates of future requirements. Maximum effort will be placed on use of modern, seagoing container ships and/or air capability to shorten logistic pipelines when feasible. Variable order and shipping time by item by materiel category will be implemented by all major requisitioning/ordering activities. Variable safety levels will be implemented in all mechanized supply systems above direct support unit (DSU) level.

b. *Responsibilities.*

(1) The NICP converts Department of the Army-approved theater stockage objectives contained in AR 11-11 into a theater-authorized stockage list.

(2) The theater commander may add or recommend additions of items to the list. The NICP may recommend additions or deletions and recommend revisions in the case of newly introduced equipment, and obsolete or critical supply items.

c. *Field Army Stockage.*

(1) Stock control and storage elements of the FASCOM maintain an up-to-date list of all items authorized for stockage. The field army commander may approve additions to the field army stockage list; however, the theater commander has authority to establish the effective date of additions or a quantitative change to the requisitioning objective. The theater commander may delegate this latter authority to the theater army commander and field army commander. The field army commander may make deletions to field

army stockage lists at any time, subject to acknowledgment by the theater commander after-the-fact.

(2) Field army stockage includes—

(a) Items authorized for stockage by supported units.

(b) Mission-essential support items.

(c) Operational readiness float items.

(d) Items qualifying for stockage, based on the demand frequency criteria.

(e) Items for support of newly introduced equipment.

(f) Reserve stocks, when authorized.

d. Theater Army Support Command Stockage. Stockage at MATCOM depots includes—

(1) Items authorized for stockage at the FASCOM and DS and GS units supported directly from theater depots.

(2) Mission-essential support items.

(3) Items not stocked in the FASCOM because the field army demand is too low, but for

which there is a theater demand meeting the criteria for stockage.

(4) Items for support of equipment newly introduced into the theater.

(5) Authorized reserves and obligated stocks.

(6) Under the direct support system concept, stockage at theater depot is limited to reserve and project stocks or a variable demand supported safety level for those items not included in the reserve and project stocks.

(7) Operational project stocks.

e. Physical Inventories. Physical inventories of depots and installations insure that stock accounting records reflect the true stock position.

(1) Depots and installations take complete inventory either at a specific time or on a continuous-cycle basis, as prescribed by the appropriate command.

(2) Depots and installations take special inventories whenever it is necessary to verify or adjust the stock record account of a particular item.

Section IV. SOURCES OF SUPPLY

9-20. General

A theater of operation obtains supplies from sources outside and within the theater. Sources outside the theater include the CONUS, other theaters, and Allied countries. Sources within the theater include local procurement, fabrication, cannibalization, captured materiel, and reclamation of supplies through repair.

9-21. Supply From Continental United States

Supply from the CONUS on a requisition basis is the normal method of supplying most items to an established oversea command. The CONUS depots and depots overseas may automatically supply a newly established theater or an operational area in which a supply system has not been developed. The CONUS supply system (i.e., USAMC NICP, Army class manager activities, and the Surgeon General) predetermines these supply requirements and normally develops them on the basis of the pertinent Army component commander's operational plans. As the theater gains control over its supply functions, it furnishes CONUS agencies available supply status information, which is a basis for modifying the automatic flow of items as necessary. The Department of the Army, based on recommendations of the theater commander, prescribes the data on which automatic supply

ceases. Coordinated action by all supply agencies is necessary to prevent interruption of supply and to avoid duplication of shipments.

a. While automatic shipments are in effect, units deployed to new theaters take an initial issue of supplies and equipment composed of the basic load (SB 38-26), prescribed load, and authorized stockage list/mission load (AR 710-2). These loads enable units to sustain themselves until resupply is available on a continuing basis. The CONUS agencies ship additional replacement and maintenance supplies periodically and automatically in accordance with established schedules. A variation to units deploying with their initial supplies and equipment occurs when units move to areas having prepositioned equipment. Under this procedure, accompanying supplies and equipment are fewer, deployment and employment are more rapid, and automatic supply furnishes continuing support.

b. Armywide shortages may cause the Department of the Army to exempt certain items from requisitioning and automatic supply procedures. In such cases, the Department of the Army may require theaters to report requirements, quantities on hand and due-in shortages, and expenditures. Based on these reports, the Department of the Army allocates available supplies on a distri-

bution schedule and ships them automatically in accordance with priorities. Alternatively, the Department of the Army may inform the theater commander of the allocation and authorize him to call the items forward by requisition.

c. The Direct Support System (DSS) concept provides for direct delivery of selected items from a CONUS depot complex to a direct support unit (DSU) or a user level organization.

d. Periodic submission of supply requisitions to the CONUS are in accordance with Department of the Army policies on military standard requisitioning and issue procedures (MILSTRIP). Except when otherwise directed, the MATCOM forwards requisitions for supplies to CONUS NICP for action.

9-22. Transfer of Supplies From Other Theaters

Transfer of supplies from other theaters is under Department of the Army direction. Such procurement is undertaken as excesses accumulate in these theaters or as operational emphasis changes.

9-23. Procurement Within a Theater

a. Procurement from sources within a theater of operations saves time and transportation, reduces the workload in the supply system, and conserves US resources.

b. In procuring local resources, arrangements with Allied governments and the needs of local populations are considerations. Useful local resources include supplies and such services as transportation, contract construction, utilities, and labor. Supplies most desirable for procurement are those whose oversea procurement conserves the most shipping space. Examples are food, solid fuels, petroleum products, ammunition, and construction materials.

c. Local resources may be available through purchase, requisition, or contribution.

d. The theater commander prescribes broad procedures for procurement of resources within the theater of operations, in conformity with local laws and customs, laws of land warfare, and regulations of higher authority. An additional consideration is the international balance of payments.

e. The US theater army commander publishes implementing instructions and directives in the form of procurement plans and policies and coordinates with collateral commands and local governments.

f. The TASCOT is normally the Army element responsible for procurement of supplies and services (less contract construction and RPMA services which are procured by the ENCOM) on a theater-wide basis. In cases when operating conditions so indicate, major subordinate commanders may receive limited procurement authority.

g. Civil affairs (CA) units assist procurement agencies in obtaining authorized local resources, uncovering hidden resources, and providing liaison with civilian agencies. Civil military operations (CMO) staff officers determine and report the effect of procurement on the local civilian economy and recommend local procurement policies to the commander.

9-24. Reclamation of Supplies

a. Reclamation of supplies through repair restores unserviceable items to serviceable condition and returns them to the supply system for reissue. Parts salvaged from unserviceable items through "controlled cannibalization" also are important sources of supply.

b. Decontamination procedures are another means for reclaiming supplies for reissue.

Section V. DISTRIBUTION

9-25. General

Distribution is the function of supply concerned with the receipt, identification, sorting, storage, transportation, and issue or final disposition of supplies. The distribution system must integrate these tasks. Efficient distribution requires knowledge of operation plans, availability of supplies, and the needs of using units.

a. *Principles.* The basic principles of distribution are as follows:

(1) The distribution system must be readily adaptable to changing situations.

(2) Sufficient supplies must be on hand to permit replacement of each day's expenditure prior to commencement of the following day's operation when possible.

(3) Supplies should be located to reduce delay in meeting demands.

(4) The distribution system must make the most efficient use of available transportation and eliminate unnecessary shipment and rehandling of supplies.

(5) Each commander should have under his control only the supplies necessary to accomplish his mission.

b. Documentation. Documentation is the preparation and maintenance of records as to the identity, quantity, location, condition, and disposition of supplies. Accurate information must be available on materiel required, on hand, due in, and due out; and on the routing of materiel in transit.

(1) Requisitions and reports of receipt or nonavailability are essential steps in documentation.

(a) Requisitioning is essentially the placing of demands for supplies and equipment on supply agencies. A requisition may be a verbal or an informal request, an estimate, a call against a credit, a status report, or the empty fuel tank of a vehicle. A requisition is usually a complete, formal document prepared and transmitted in accordance with MILSTRIP (AR 725-50).

(b) Requisitions within a theater vary among classes of supply because of differences in physical characteristics and methods of handling. Use of ADP, high-speed transmission, and single line item requisitions speeds the requisitioning process.

(2) The purpose of documentation is to provide supply and shipping information required by the consignor, carrier, and consignee to identify and transport supplies. A single document that provides complete information for the agencies concerned is desirable.

(3) The CONUS air or water terminal is responsible for insuring that shipments are forwarded with proper manifests, addressees, and stowage plans. In the theater of operations, TASCOR shipping agencies are responsible for proper identification of shipments. The shipper normally is responsible for preparation of documents initiating movement.

(4) Documentation provides—

(a) Sufficient information to transportation agencies for control and identification of shipments at transfer points.

(b) Specific supply information to designated combat service support agencies.

(c) Advice to the consignee that the shipment is en route.

(d) A basis of payment to nonmilitary carriers.

c. Marking, Packaging, and Packing. Marking of supplies and equipment normally consists of the address, color-coded markings, and identification of contents. Facilities for loading and unloading and the necessity for conservation of shipping space determine methods of packaging. When suitable materials handling equipment is available, use of pallets, containerization, and other bulk handling systems are considerations. Packaging and packing must insure adequate protection against rough handling and the elements both en route and in storage.

9-26. Storage

a. General. Supplies are stored in depots, supply points, and distribution points; and may be held in transit at transportation terminals. In the absence of depots, GS and DS supply units operate supply points. Stocks at transportation terminals are placed under intransit holding pending further disposition. Handling, shelter, and protection are necessary each time supplies are stored or held in transit; therefore, the number of storage handling operations should be minimal.

b. Depots. The depot, when employed, is an integral COMMZ storage and distribution facility of the supply system. In the FASCOM, GS and DS supply units of the support brigades operate the supply facilities. The mission of a depot may vary but may include any combination of storage, maintenance, fabrication, and field services. In the theater of operations, the mission is normally limited to GS level field services; GS level maintenance; receiving, storing, and warehousing; maintaining stock in storage; and shipping supplies—all in accordance with directives from MATCOM's MMC.

(1) The field depot is a command-type, group-size organization. It consists of a headquarters and headquarters company, with a variable number of organizations and units assigned or attached. Such organizations include GS supply units, GS maintenance units, GS service units and other GS specialized teams and detachments. The field depot consists of multiple, dispersed operational storage and maintenance sites. Field depots are located throughout the COMMZ (fig. 9-2).

(2) Forward depots are normally not of a fixed nature and move as the field army advances. The stocks stored in the forward depot are primarily reserve stocks. The depot maintains sufficient operational stock, however, to provide a sup-

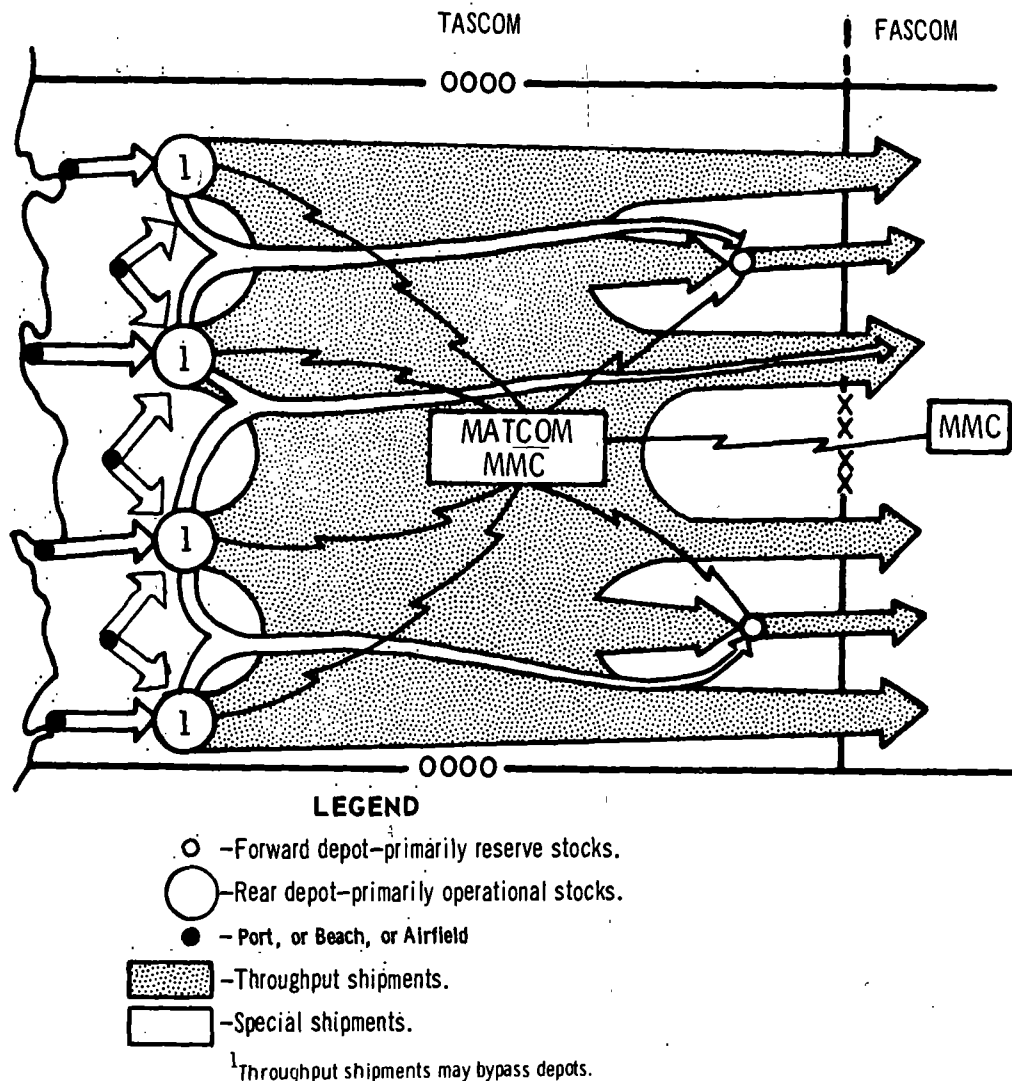


Figure 9-2. Depot distribution pattern (schematic).

ply support mission for reasonable employment of the assigned depot units.

(3) Rear depots are near ports of entry—seaports, beaches, and airfields—where supplies enter the theater (fig. 9-2). They are generally fixed, making maximum use of existing facilities. These depots primarily store operational stocks and are sufficiently forward from ports of entry to permit shipment to multiple storage sites with minimum lateral haul. Actual location will depend on topography and rail and road networks, as well as existing facilities. Distribution of stocks in these depots is to meet supply storage and distribution operations rather than to support a particular force. These depots do not maintain a strict balance of stocks; yet, their balance is sufficient to provide dispersion among depots for defensive measures.

(4) The concept for storage operations in-

cludes throughput of supplies, minimum administration, maximum mechanized handling of supplies, and improved specialization of labor.

(a) Throughput distribution of supplies is one of the most significant means of reducing inventory requirements. Differences in areas of operations, tactical plans, and enemy capabilities will influence the quantity of throughput that is desirable or that can be built into the supply system.

(b) Depots perform only those administrative functions that pertain to storage operations. These functions include maintaining a locator system, reporting receipts, and processing shipments. The locator system is simple, accurate, and responsive to mobile storage operations.

(c) Supplies stored in the field depot represent bulk quantities that in most cases are adaptable to materials handling equipment. The GS

function is essentially a wholesale operation. The objective is to group those supplies adaptable to palletization and containerization in one supply unit to permit the optimum use of mechanized handling techniques. Accordingly, it is not enough to equip the supply units with appropriate mechanized capabilities, but it is also essential that supplies be prepared, handled, and moved in a manner compatible with mechanization. Thus, with palletization of supplies in the CONUS, the mechanization chain is not broken until the supplies pass through the supply system to the lowest practical echelon.

(d) The GS supply functions can be subdivided into the tasks and skills required to perform storage operations. To maximize their productivity, supply units are organized to perform related tasks with groups of supplies that have similar handling requirements.

9-27. Theater Distribution

a. The MATCOM in conjunction with the FASCOM support brigades are responsible for the distribution of all supplies (less medical, cryptologic, and few other minor exceptions) in the theater. The medical command and the medical brigade are responsible for the distribution of medical supplies in the TASCOM and FASCOM, respectively.

b. The TASCOM develops the overall combat service support plan. Based on this plan, the MATCOM, in conjunction with the MMC and the MCC of the transportation command, prepares the supply distribution plan in detail. The plan prescribes the general area location and mission of each field depot. Once the depot is activated, supply and service units and/or maintenance units are assigned or attached and the depot com-

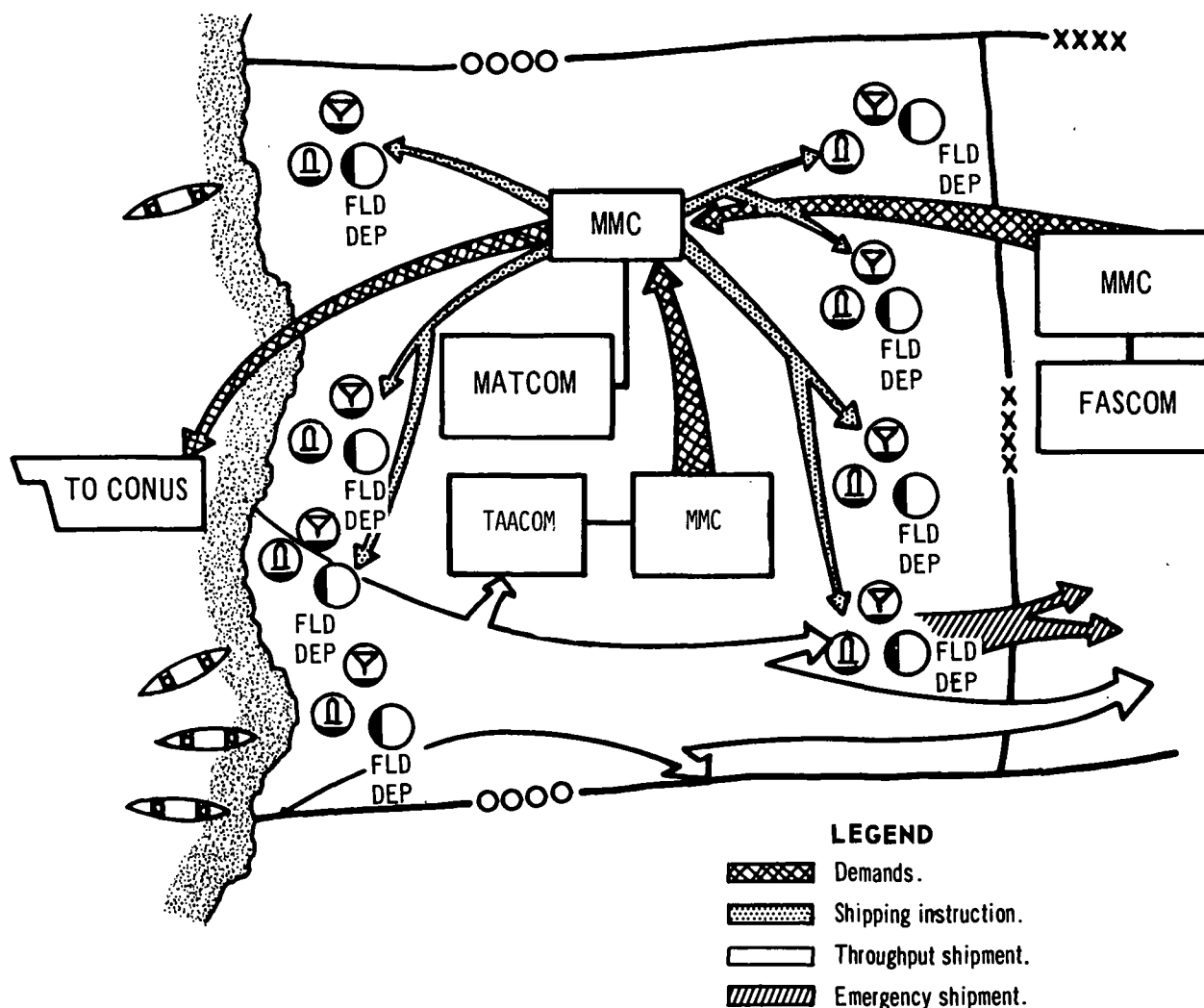


Figure 9-3. Supply flow (schematic).

mander assigns areas or facilities for each mission of the depot.

c. The MATCOM plans and projects the supply workload for the depot. The depot acts as a storage location, following day-to-day instructions from the MMC. The MMC communicates directly with the depot regarding shipping and receiving instructions. The depot passes the information to the appropriate storage site. When supplies are received, the storage site verifies the quantity, records the storage location, and forwards the receipt document to depot headquarters. Depot headquarters simultaneously updates the depot locator system and passes receipt information to the MMC by transceiver.

d. Details may be found in FM 54-3 and FM 54-7 on distribution procedures for the COMMZ. A brief discussion of such procedures follows in (1) through (4) below.

(1) The MATCOM MMC receives requisitions or strength reports from the FASCOM MMC for field army requirements and from the TAACOM MMC for COMMZ requirements. In response to these requisitions or reports, the MATCOM MMC sends shipping directives (or materiel release orders) to the field depots and other GS supply installations in the COMMZ area as shown in figure 9-3.

(2) The MMC places transportation requirements on the MMC, since the MCC has knowledge of the total movement requirement (supply, tactical, administrative); the mode and terminal capabilities; and the shipping and receiving capabilities of each supply activity, along with their current and forecast shipping/receiving workloads.

(3) Emphasis is on scheduled supply for mission-essential items and for items for which requirements can be reasonably predicted. Scheduled supply is a system whereby any unit (user or

supplier) is furnished some or all of its supply requirements by a previously planned schedule which specifies items, quantities, time and place of delivery. The user can modify or change this schedule at any time by notifying the supplier. Disruption of electronic communications will cause institution of emergency control procedures using the USAMC logistic control offices (AR 725-50) in the CONUS.

(4) The throughput distribution concept should have maximum use. Rear depots in the COMMZ normally satisfy field army requests, with delivery as far forward into the combat zone as feasible, bypassing the forward depots. In the event of LOC disruption or a major forward displacement of the combat forces, forward depots may ship stocks to supplement or to replace temporarily deliveries from rear depots. On an exception basis, the MMC in coordination with the MCC, can request diversion of intransit shipments.

e. In FM 54-3 and FM 54-7 are details on field army distribution. A brief discussion of such distribution follows in (1) and (2) below.

(1) In operation, the support brigade MMC and the FASCOM MMC exploit the full potential of ADPE. A reliable communications net and transceivers, card-punch machines, and other mechanical devices are required.

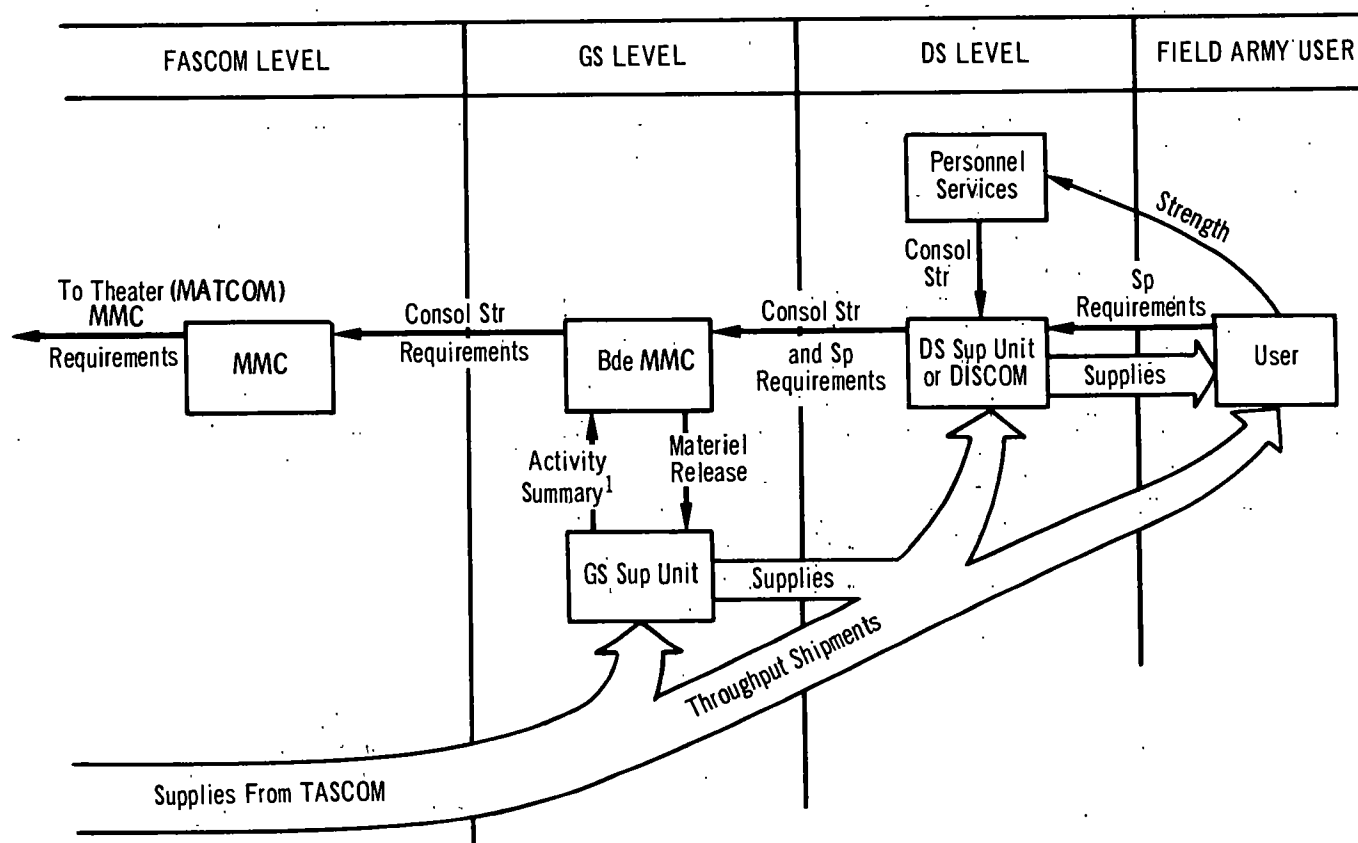
(2) Divisional and nondivisional DS units transmit supply requirements to the appropriate support brigade MMC, which issues shipping instructions to storage units. If the required items are not available among the stocks controlled by a particular MMC, the center transmits the requirements to the FASCOM MMC, which, depending on the situation, may direct shipment from a support brigade that has the item or refer the requirements to the COMMZ for action.

Section VI. COMMODITY SUPPLY OPERATIONS

9-28. Class I Supply

a. Class I supply in a theater of operations is primarily a matter of large bulk and tonnage. Refrigeration is always a consideration in storage and transport operations. To reduce supply administration and physical handling of supplies, the class I system uses as few intermediate echelons as possible. Issue of preventive medicines such as salt tablets, soap, insecticides, toilet paper, and similar items may be through class I channels.

b. Strength reports, with the addition of any special requirements, act as the triggering device to cause the shipment of commodities (fig. 9-4). The personnel services company of the appropriate support brigade or the personnel services division of the DISCOM administration company provides strength data. The brigade MMC submits strengths and special requirements to the FASCOM MMC, which, in turn, submits the field army requirements to the MATCOM MMC. Shipments from the TASCOT bypass GS units, wherever practicable. When feasible, shipments origi-



¹Activity summary consists of receipt, requested inventory status reports, and materiel release denials.

Figure 9-4. Flow of items consumed according to strength (schematic).

nating at the GS level go directly to the using unit.

9-29. Class II Supplies

a. Class II supplies include a large number and variety of items. Disposition of balanced stocks of fast-moving items is lateral and forward to permit rapid response to frequent demands. Rear depots normally store slow-moving items for shipment forward when required.

b. Requirements for class II supplies (nonregulated), in the form of single line item requisitions, flow from the user through the various supply control elements as shown in figure 9-5. The GS supply units are storage points and react to instructions contained in the MMC's materiel release orders or shipping directives. The DS supply units, including those of the division, fill user requirements from available stocks. The DS elements submit requirements to designated support brigade MMC, using automated communications. These MMC direct shipment from available GS stocks and coordinate movement with the MCC. The support brigade MMC reports status of au-

thorized stockage to the FASCOM MMC, which submits requirements to the MATCOM MMC. Shipments from field depots and field army GS supply units bypass intermediate storage locations and proceed as far forward as feasible.

9-30. Class III Supplies

a. Class III supplies usually make up more than $\frac{1}{2}$ the tonnage shipped to the theater. Petroleum fuels are normally handled in bulk. The theater petroleum pipeline system stores and distributes bulk and packaged fuels. Packaged greases, oils, and lubricants are stored and issued by the field depot system. FM 10-67 contains details on class III distribution.

b. Pipelines provide the most economical, efficient, and effective means of moving large quantities of bulk liquid fuels. The plan for distribution of liquid fuels makes maximum use of this method of delivery. When the situation is not stable or areas which the pipeline traverses are not secure, pipelines are vulnerable to interdiction and pilferage. Under these conditions, pipelines

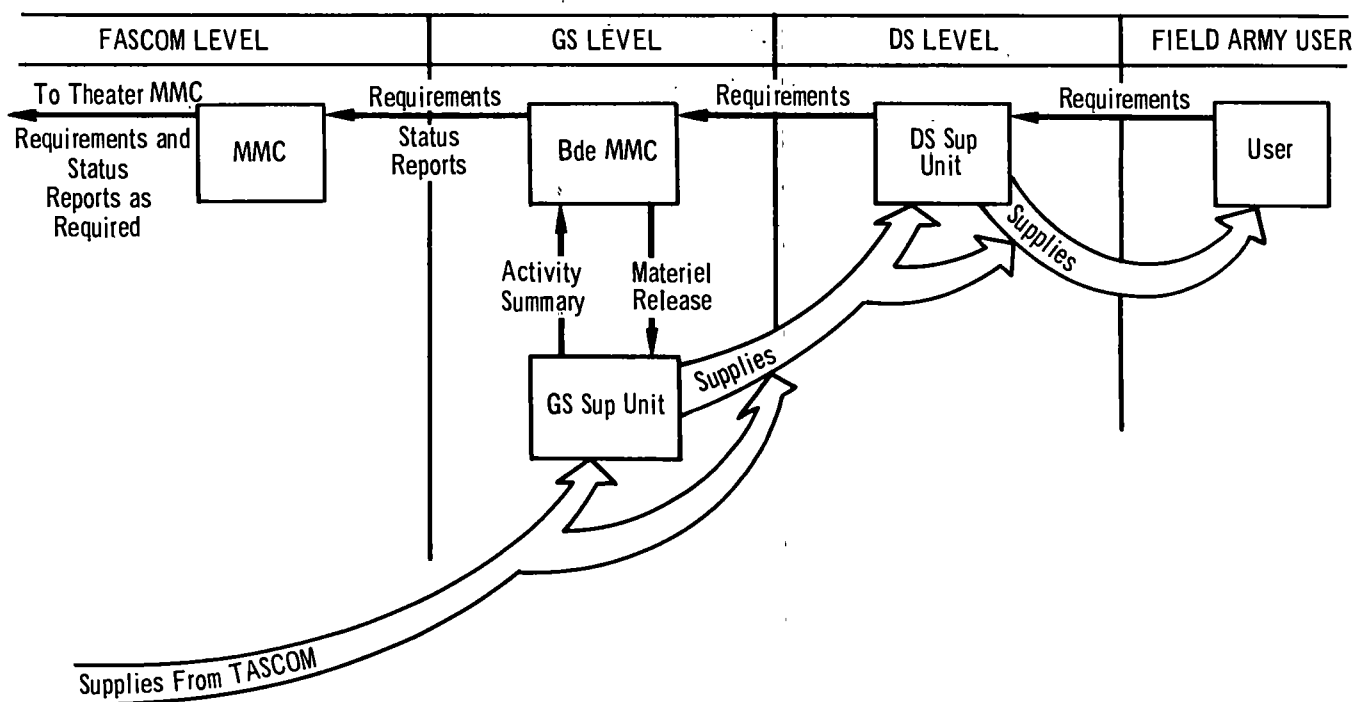


Figure 9-5. Flow of class II supplies (nonregulated) system (schematic).

are not an effective means of distributing bulk fuels.

c. The theater petroleum supply system begins when bulk and packaged petroleum products is received in the theater. Large ocean tankers deliver bulk petroleum to the theater at marine petroleum terminals either across the dock or by means of submarine pipelines from off-shore moving facilities. Floating hoses may be used in over the beach operations. Packaged products are delivered at dry-cargo port or beach facilities. Large lighters may move products from shipping to the beach when use of docks or submarine pipeline is not practicable. Tank farms receive the bulk petroleum supplies, preferably by pipeline. Field depots receive the packaged greases, oils and lubricants for distribution through the field depots and GS and DS supply organizations to consumers throughout the theater.

d. A theater petroleum pipeline system normally is intersectional and includes discharging facilities and dock manifolds at ports, water terminals, and other points of entry; inland tank farms, terminals, and other petroleum storage facilities; pump stations; and pipelines that extend from points of entry as far forward as practicable into the combat zone. Figure 9-6 shows such a system schematically.

e. Bulk petroleum products are filled in contain-

ers (5-gallon cans, 55-gallon and 500-gallon drums) at petroleum terminals of the theater petroleum pipeline system which is responsible for supply of packaged fuels. Packaged fuels generally are limited to the minimum essential for continuous support and operational necessity. When petroleum fuels must be packaged, the bulk reduction operations are performed as near to the intended consumer as practical.

f. Specially designed organizations operate the bulk petroleum distribution system in a theater of operations.

(1) In the COMMZ, depending on the magnitude of the petroleum distribution system needed to support the theater petroleum requirements, a petroleum brigade (TOE 10-201) or a petroleum group (TOE 10-202) normally operates the theater petroleum pipeline system. When a petroleum brigade is authorized, it is assigned to MATCOM and provides command control over the operations of two or more petroleum groups.

(2) In the combat zone, the petroleum supply battalion that serves each corps, and the battalion that serves the field army services area troops, operate the bulk petroleum supply system (fig. 9-7). In divisions, the supply and transport battalion operates the system. The DS supply and service battalions serve nondivisional units.

(3) Within the framework of current doctrine, a joint petroleum office (JPO) is at theater

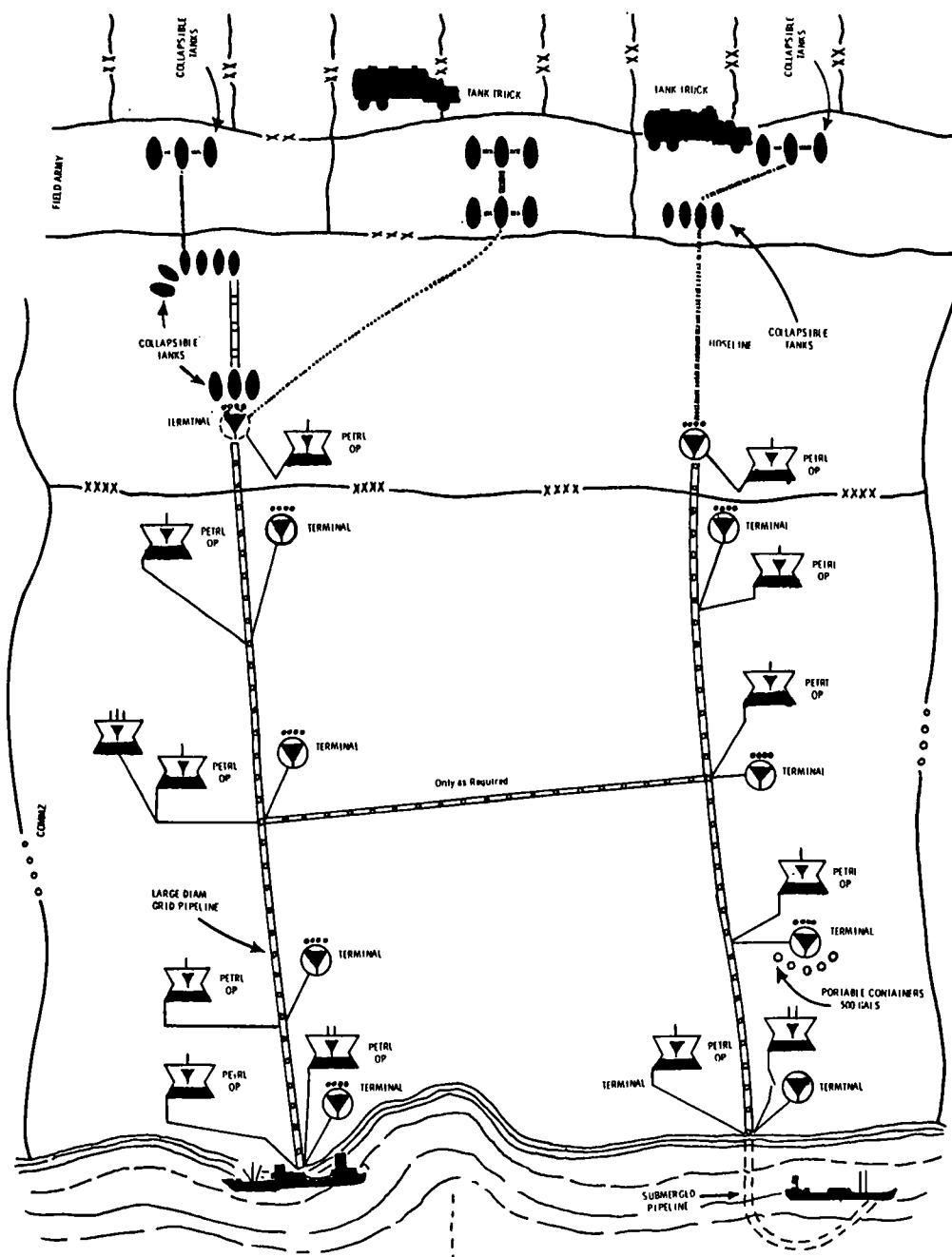


Figure 9-6. Theater pipeline system (schematic).

headquarters, with subarea petroleum offices (SAPO) established as required. The JPO advises on and coordinates petroleum planning and policy matters, advises on the allocation of petroleum products and facilities, and assures that the requirements of each of the military services are included in the total theater petroleum requirements. The JPO receives and consolidates theater requirements for bulk petroleum products and packaged fuels submitted by the military services or from the SAPO, if established, and submits the

consolidated petroleum slate, i.e., requisition to CONUS for supply action.

g. Under optimum conditions, bulk petroleum products are scheduled through the theater pipeline system at a constant rate that may be changed only by requests placed on controlling headquarters to adjust or alter deliveries by consuming activities. The MATCOM, by means of its petroleum brigade or petroleum group, establishes and operates petroleum bulk products terminals as far forward as practicable, to include the field

army area. The FASCOM supervises petroleum support for the field army and coordinates supply operations with the MATCOM in the COMMZ.

(1) In the COMMZ, the petroleum operating battalions use their petroleum operating companies to deliver bulk products to DS supply and service battalions for issue to consumer units. Petroleum operating companies, operating terminals of the theater petroleum pipeline system in the field army, supply bulk and packaged fuels to the petroleum supply battalions of the support brigades.

(2) In the field army, the support brigade petroleum supply battalions deliver bulk products both to supply and service company of the DISCOM and to DS supply and service companies in the corps and army support brigades for issue to consumer units (fig. 9-8).

(a) Petroleum supply companies of the battalions receive, store, and issue bulk products

at class III supply points and deliver bulk products by hoseline to major consumers.

(b) Medium truck companies (petroleum) of the battalions deliver bulk products from the class III supply points as far forward as the situation permits, but normally to DS supply units and to divisions. Deliveries bypass intermediate storage locations whenever possible.

h. The system supplies bulk petroleum by immediately replacing quantities issued and consumed. Status reports (or activity summaries), which substantiate issues of products made during any given period, are the bases for system replenishment. When and where controls are imposed, the objective is not to allocate or delimit quantities of products, but to provide information to the command for decisions affecting diversions or other adjustments needed to satisfy requirements. The MMC coordinates movement plans with the MCC to assure the distribution pattern developed

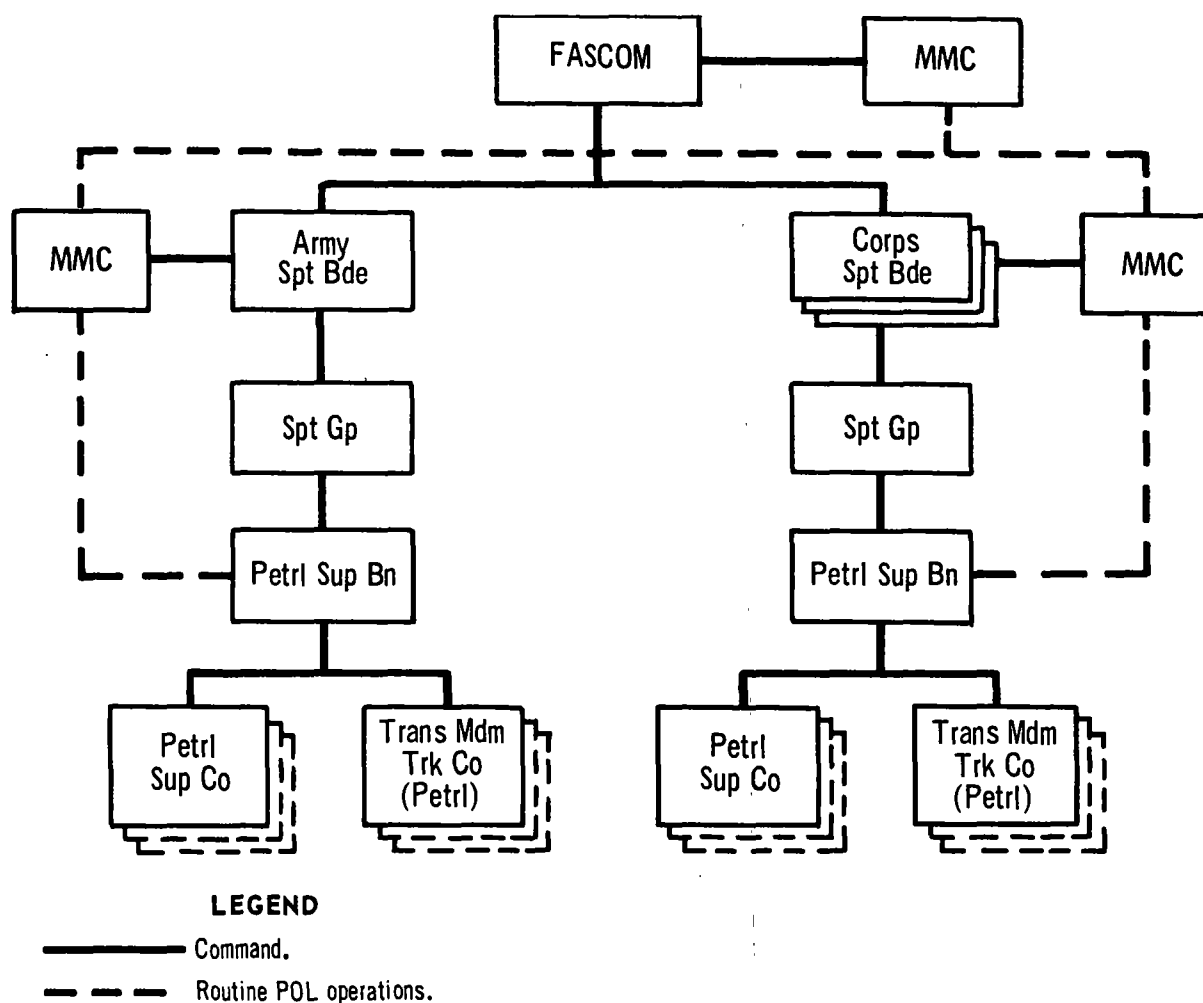


Figure 9-7. Organization for general support (GS) supply and distribution of bulk petroleum in the field army.

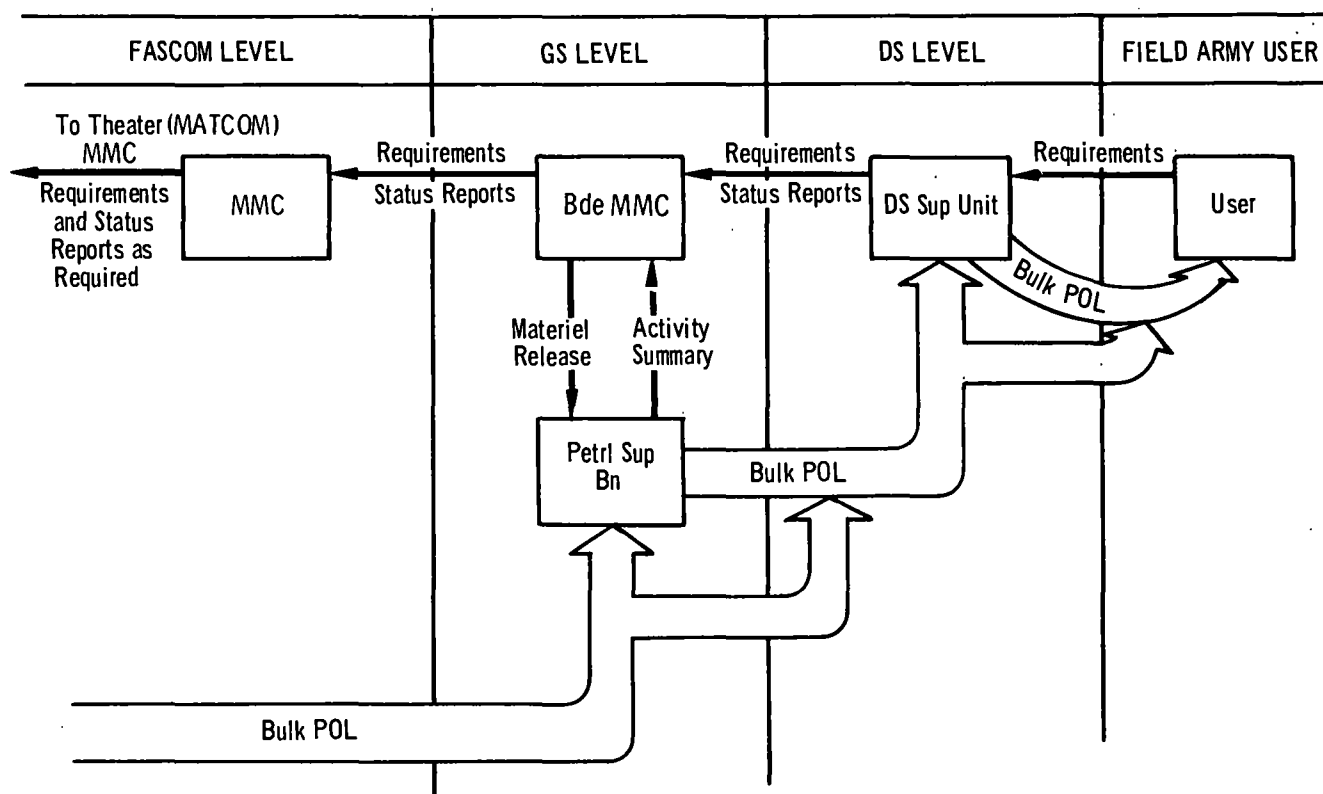


Figure 9-8. Flow bulk petroleum, field army support command (FASCOM) (schematic).

makes optimum use of all transportation modes, (except for pipeline transportation of bulk petroleum) available for support of the bulk class III movement requirement. Packaged products are programmed for distribution (para 9-25 through 9-27) as general cargo.

(1) Centralization of inventory control functions is at the MMC in each support brigade headquarters in the combat zone. The MMC, unless otherwise directed, receives requirements (or forecasts) from the DISCOM and nondivisional DS supply units, and receives activity summaries from GS petroleum suppliers. The support brigade MMC, depending on its degree of authority or control, may influence supply actions by passing a requirement to the FASCOM MMC or by diverting products already moving from assigned destinations. The MMC exercises such options within the parameters specified by support brigade headquarters. In any event, the MMC transmits or transceives to the FASCOM MMC, as directed, activity summaries that trigger replenishment deliveries.

(2) The FASCOM MMC computes requirements, maintains centralized cognizance over the field army inventory of petroleum, receives and

processes requirements from support brigade MMC, and provides data and summaries to the FASCOM staff on which to base decisions. The FASCOM MMC transmits activity summaries, which are the basis for necessary replenishment and supplemental requirements, to the MATCOM MMC.

(3) The MATCOM MMC receives activity summaries from the petroleum group. The center also provides reports required by the MATCOM to monitor the performance of the system, approves supplemental requisitions from the FASCOM MMC, consolidates projected requirements in the form of planning estimates from the FASCOM and other US forces, and forwards the consolidated requirements to the JPO (fig. 9-9).

9-31. Class IV and Class VII Supplies

When not regulated, commodities in these classifications follow generally the system outlined for class II (para 9-29). If items are regulated or controlled, issue requires command approval, as shown in figure 9-10. The MMC advises the appropriate commander on availability of items. Upon command approval, the appropriate MMC

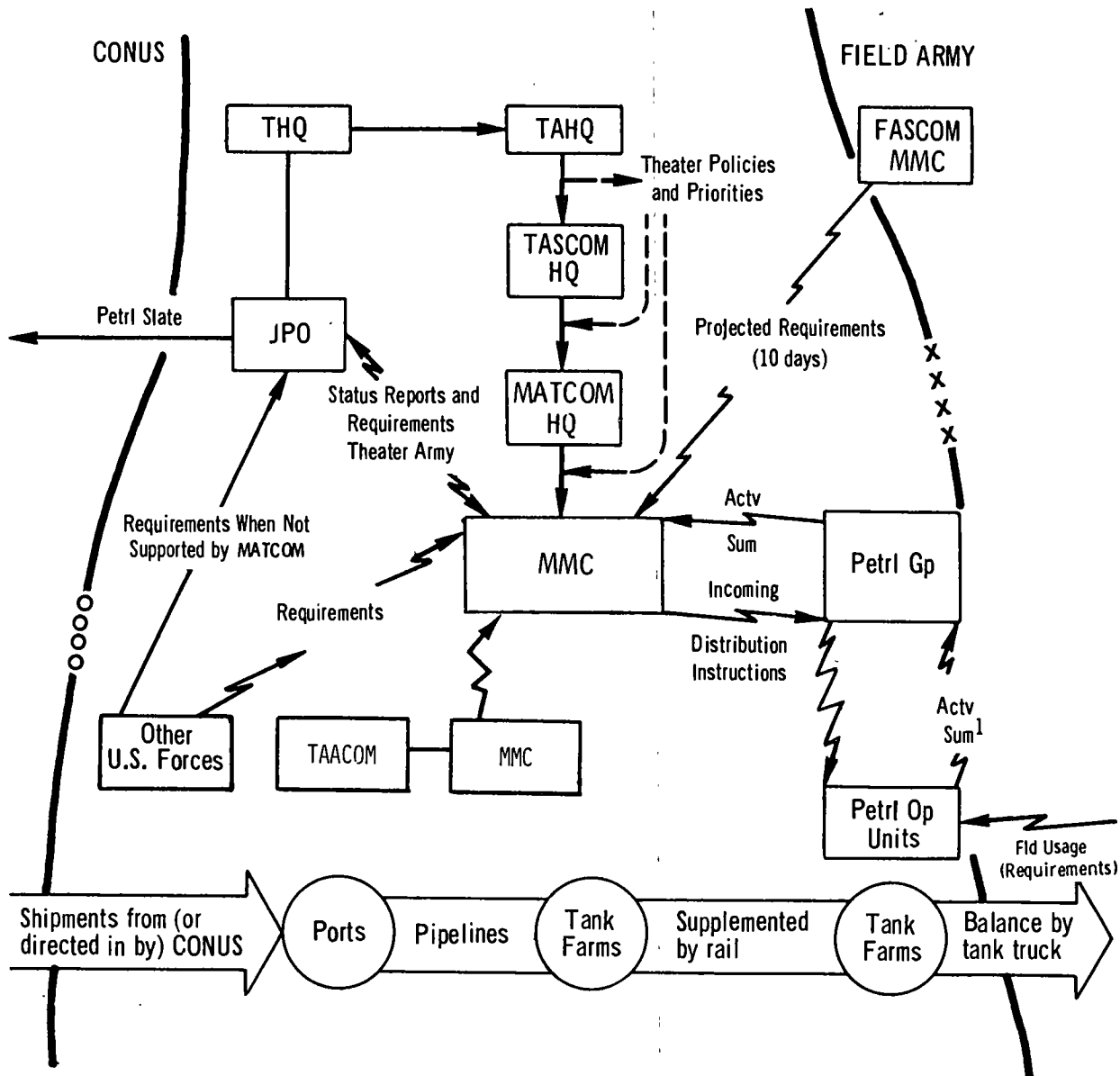


Figure 9-9. Petroleum requirements and distribution (schematic).

issues shipping instructions to the storing GS unit, which makes shipment directly to the user.

9-32. Class V Supplies

a. General. Supply of conventional and special ammunition comprises class V supply. Ammunition supply in the theater of operations is provided at the direct and general support levels. At both levels, conventional ammunition companies operate ammunition supply points (ASP) for conventional ammunition and special ammunition companies operate special ammunition supply points (SASP) for special ammunition. Staff supervision of ammunition supply in major combat service support headquarters is exercised by ammunition service staff personnel included within

the staff of the Assistant Chief of Staff (ACofS), materiel, at the headquarters of the TASCOM, MATCOM, FASCOM, and corps support brigade. At these headquarters, a materiel management center is provided (except for TASCOM) that operates under the supervision of the ACofS, materiel. Ammunition service personnel in the missile and munitions branch of the center perform class V supply management. These centers can also provide personnel to form a "Special Ammunition Logistical Element (SALE)" to be located at the headquarters (e.g., tactical operations center) of the senior commander concerned to aid in supply and resupply of special ammunition. Detailed information on ammunition service in a theater of operations is contained in FM 9-6.

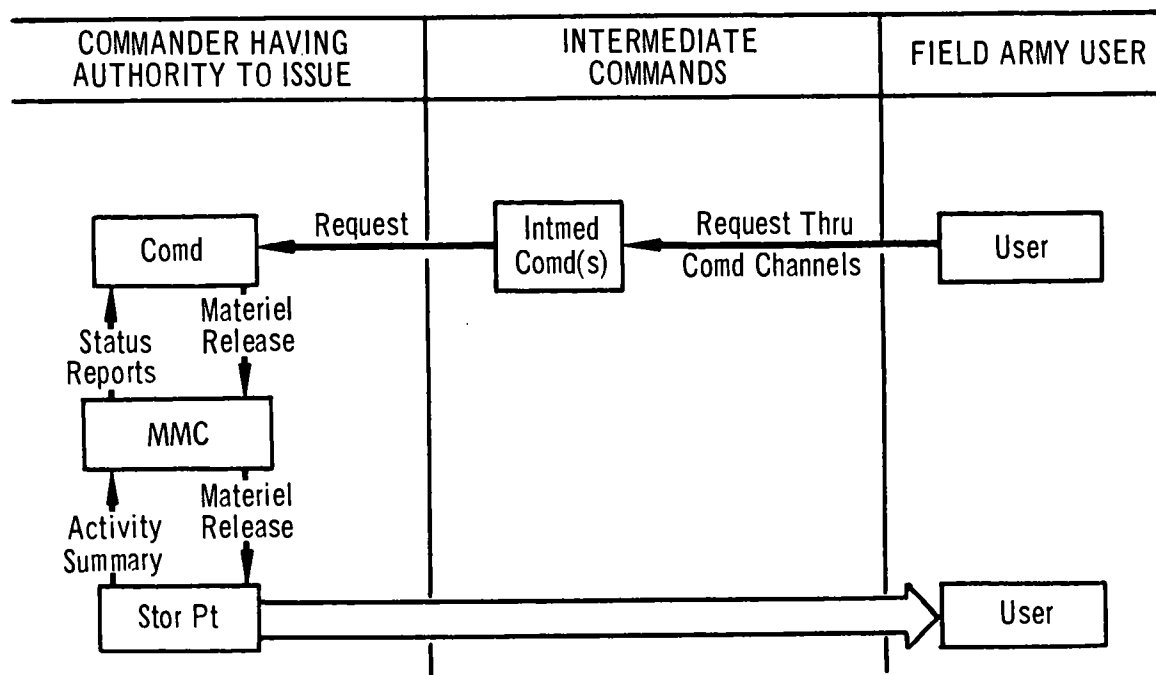


Figure 9-10. Flow of class IV and VII regulated items (schematic).

b. *Communications Zone.* Ammunition supply depots are part of the ammunition depot complexes located normally in the forward and rear areas of the COMMZ with a minimum of one forward and one rear ammunition depot complex per corps slice. Each complex usually contains a conventional ammunition depot and a special ammunition depot. These depots support ammunition supply points in the combat zone as well as using units located in their areas of responsibility within the COMMZ. Forward depots primarily provide combat essential reserve stocks. Forward depots also serve as a means to disperse stocks within the COMMZ and provide a source for the combat zone when shipments cannot be made from rear depots. Normally located just to the rear of the combat zone along main supply routes, forward depots move as necessary to be positioned properly to provide support as the field army moves forward. Also located along main supply routes, but to the rear of the COMMZ near airports and seaports, are rear depots. These are larger and more static installations, that usually require facilities to protect stocks under varied weather conditions. Containing the bulk of ammunition stocks, rear depots store ammunition primarily for operational use.

c. *Combat Zone.* Ammunition supply is based on a corps slice of the combat zone. Direct support ASP/SASP normally are positioned forward in the corps area near the division rear boundary.

Through coordination with the supported division ammunition officer, a direct support ASP may be established in the division tactical area to facilitate continuous support of the division's maneuver elements. General support ASP/SASP usually are positioned in the corps rear area or within the field army service area, as the tactical situation dictates. Primarily containing reserve stockage, general support supply points serve as a means to disperse stocks within the combat zone due to their rearward location; provide a source in the event the forward direct support supply points are destroyed; furnish replenishment shipments to forward supply points when requirements cannot be met by COMMZ depots; and support using units located in corps rear area and in the field army service area.

d. *Shipment of Ammunition.* Supply point distribution is the normal method of providing ammunition to using units. Conventional ammunition will be assembled in unitized (palletized and/or containerized) loads at the manufacturer for distribution down to and including the direct support level in the combat zone. These loads are assembled in a manner consistent with the requirements for explosive compatibility that are prescribed in applicable Army Directives. Figures 9-11 and 9-12 illustrate the flow of conventional and special ammunition as well as depict throughput variations. Maximum throughput is a basic characteristic of ammunition supply. The preponderance

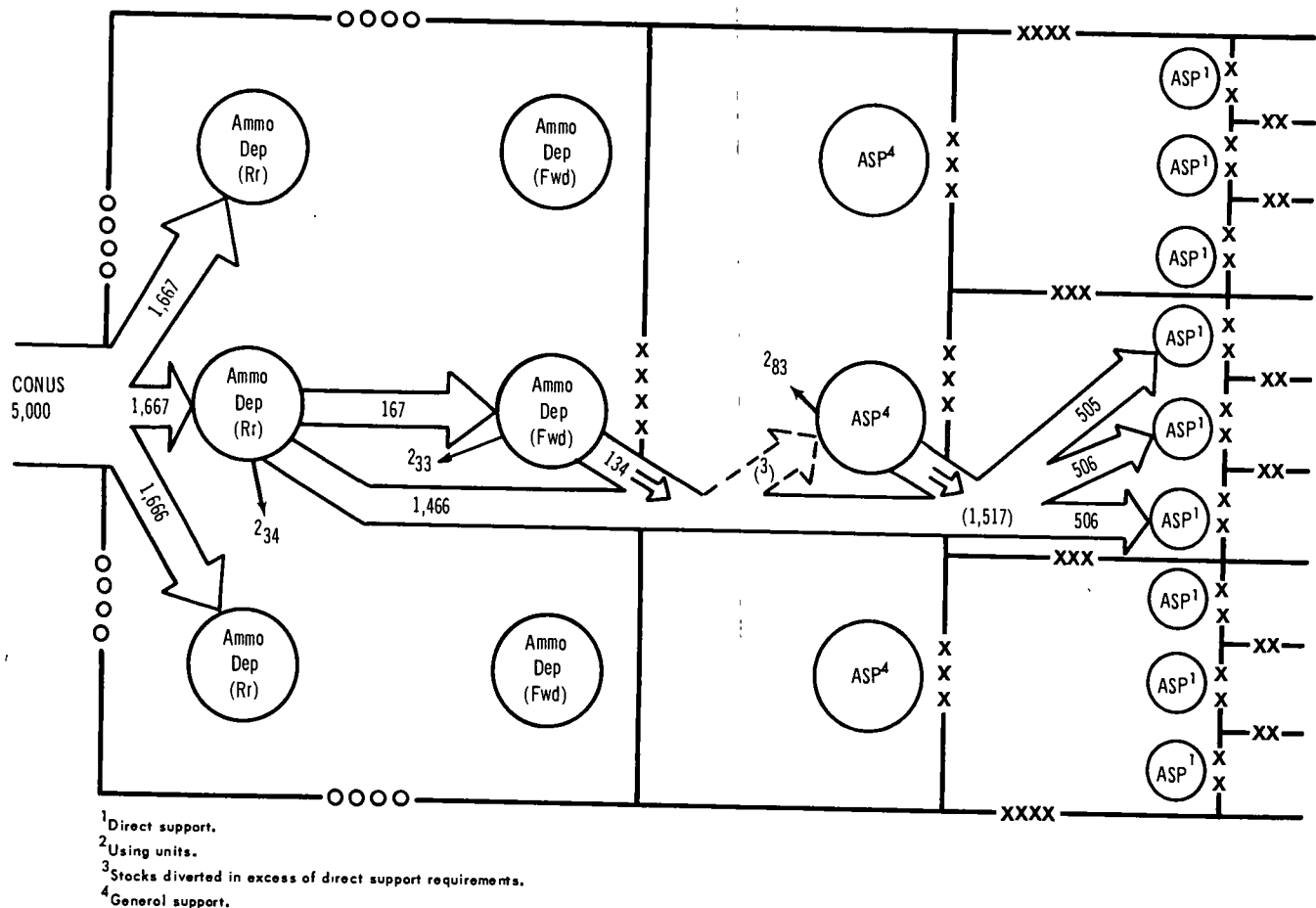


Figure 9-11. Flow of conventional ammunition (corps slice of theater in short tons per day) (schematic).

of throughput is from rear COMMZ depots to direct support supply points in the combat zone. Air transport will be emphasized for throughput of special ammunition. In figure 9-11 an example flow for conventional ammunition shows an equal distribution to each corps slice. However, distribution usually varies according to the missions assigned each corps and any expenditure restrictions imposed. Since distribution of special ammunition depends on command decision, the desires of the tactical commander to whom these items are allocated govern throughput of special ammunition. The field army commander normally allocates ammunition to each corps based on the main and supporting tactical efforts. In any situation, throughput of ammunition requires close coordination between the movement control centers and the materiel management centers at the corps support brigade, FASCOM and MATCOM headquarters to insure ammunition is routed or rerouted to meet tactical changes. In addition, within the combat zone, close coordination between the FASCOM, corps support brigade, and

ammunition group headquarters is needed to make necessary shifts of ammunition supply units between corps slices to meet varying requirements.

e. Conventional Ammunition Control. Procedures for control of conventional ammunition involve the basic load, required supply rate (RSR), and available supply rate (ASR).

(1) *Basic load.* The basic load is that quantity of ammunition which is authorized and required to be on hand within a unit or formation at all times. Authorized by major commanders, the basic load enables the unit to accomplish its mission until resupply can be effected. Considerations in establishing basic loads include the unit mission, unit transport capability, and anticipated resupply time. The basic load is continuously reconstituted as it is used. The basic load includes ammunition carried by the individual soldier, ammunition stowed in self-propelled weapons, ammunition carried in prime movers, and ammunition stowed at gun positions and in unit dumps. The

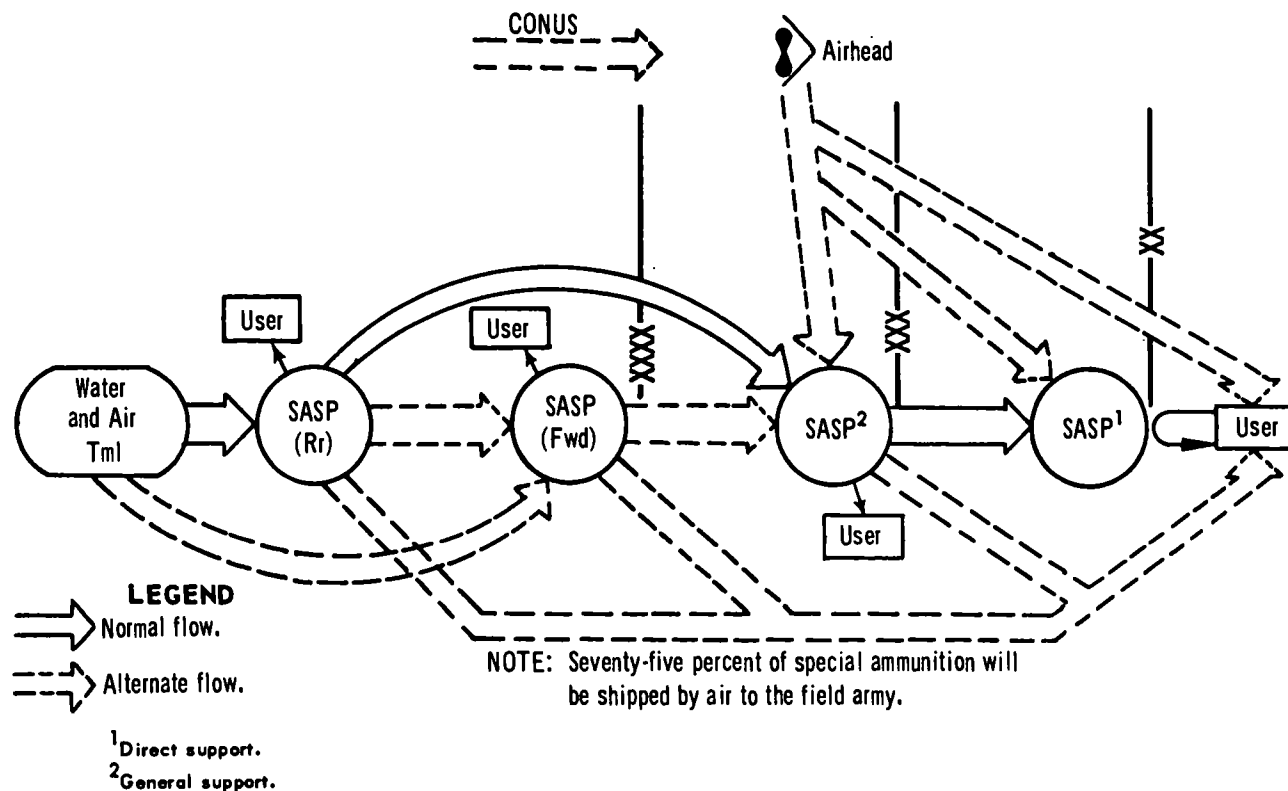


Figure 9-12. Flow of special ammunition, guided missiles, and special ammunition repair parts (schematic).

basic load is expressed in rounds, units or units of weight as appropriate. The percentage of each kind of ammunition (e.g., high explosive, white phosphorous) is left to the discretion of the unit commander when availability permits.

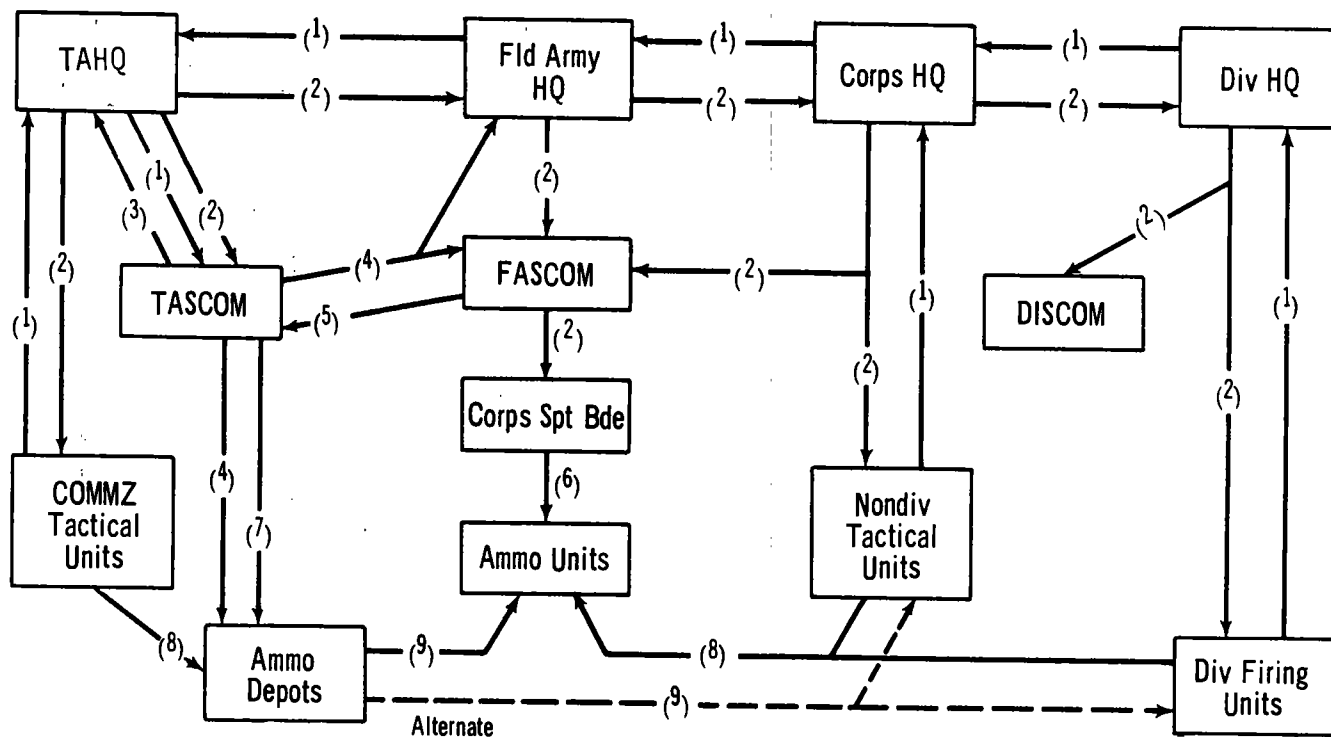
(2) *Required supply rate.* The RSR is the amount of ammunition expressed in terms of rounds per weapon per day for ammunition items fired by weapons and in terms of other units of measure per day for bulk allotment and other items, estimated to be required to sustain operations of any designated force without restriction for a specified period. Tactical commanders use this rate to state their requirements for ammunition to support planned tactical operations at specified intervals. The required supply rate is submitted through command channels. Figure 9-13 illustrates the routing of RSR. Computation of RSR is applicable to tactical weapons only. Each tactical commander develops RSR and submits them to his next higher headquarters.

(3) *Available supply rate.* The ASR is the rate of consumption of ammunition that can be allocated, considering the supplies and facilities available for a given period. For ammunition item fired from weapons, this rate is expressed in

rounds per weapon per day. For other items, such as antitank mines, handgrenades, demolition explosives, etc., the rate is expressed in terms of units of measure for specified items, e.g., per day, per week. It is applicable only to the weapons of divisions, separate brigades, armored cavalry regiments, combat engineers, and artillery. The theater army commander announces to army group or field army commanders the ASR for each item of ammunition. Each tactical commander announces an ASR to his next subordinate tactical commander. Figure 9-13 illustrates the routing of ASR.

f. Special Ammunition Controls. A discussion follows ((1) through (3) below), concerning the necessarily rigid controls over special ammunition (fig. 9-14).

(1) *Special ammunition load.* The special ammunition load (SAL) is a specific quantity of special ammunition to be carried by a delivery unit. The SAL is not a fixed quantity, as is a basic load, but is established by command action, depending on the mission, the tactical and logistic situation, and the capability of the unit to transport and use the load. Replenishment of the SAL is not auto-



- 1 Required supply rate (consolidated at each command headquarters).
- 2 Available supply rate (recalculated by each command headquarters for subordinate units).
- 3 Ammunition availability (quantities on hand and immediately due in).
- 4 Ammunition credits (constitute authority to request shipment of ammunition).
- 5 Request to ship ammunition (prepared by support elements).
- 6 Stock levels for each ammunition unit (based on available supply rates).
- 7 Shipping order (issued by the MMC).
- 8 Ammunition pickup (supply point distribution).
- 9 Ammunition shipment.

Figure 9-13. Flow of conventional ammunition and routing of required and available supply rates (schematic).

matic, but requires a command decision based on the situation, mission, and capability of the unit. The SAL may vary from day to day and among similar delivery units.

(2) *Special ammunition allocation.* A special ammunition allocation is the designation, for planning purposes, of the special ammunition which a commander may expend when the use of such ammunition is authorized.

(3) *Special ammunition stockage.* This is a specific quantity of special ammunition to be stocked in an ammunition service support unit or installation. Establishment of this stockage is by command decision, based on the tactical and logistic situation and the capability of the units concerned to receive, store, maintain, and issue the ammunition. Special ammunition stockage has no fixed quantity or rate, and replenishment of this stockage is accomplished by command decision.

g. Tactical Control of Ammunition.

(1) *Conventional ammunition.* The theater army commander allocates ammunition to the field army. The field army commander suballocates to subordinate corps; and corps, to divisions. Each tactical commander allocates ammunition based on the main and supporting tactical efforts. The FASCOM MMC receives control information from FASCOM headquarters, based on the allocation information received from the field army. The MMC receives similar information from the corps through corps support brigade headquarters.

(2) *Special ammunition.* The allocation of special ammunition is from commander to commander (i.e., theater army, to field army, to corps, to division commander). As a result, the commander of a logistic headquarters can provide only the means to carry out the desires of the

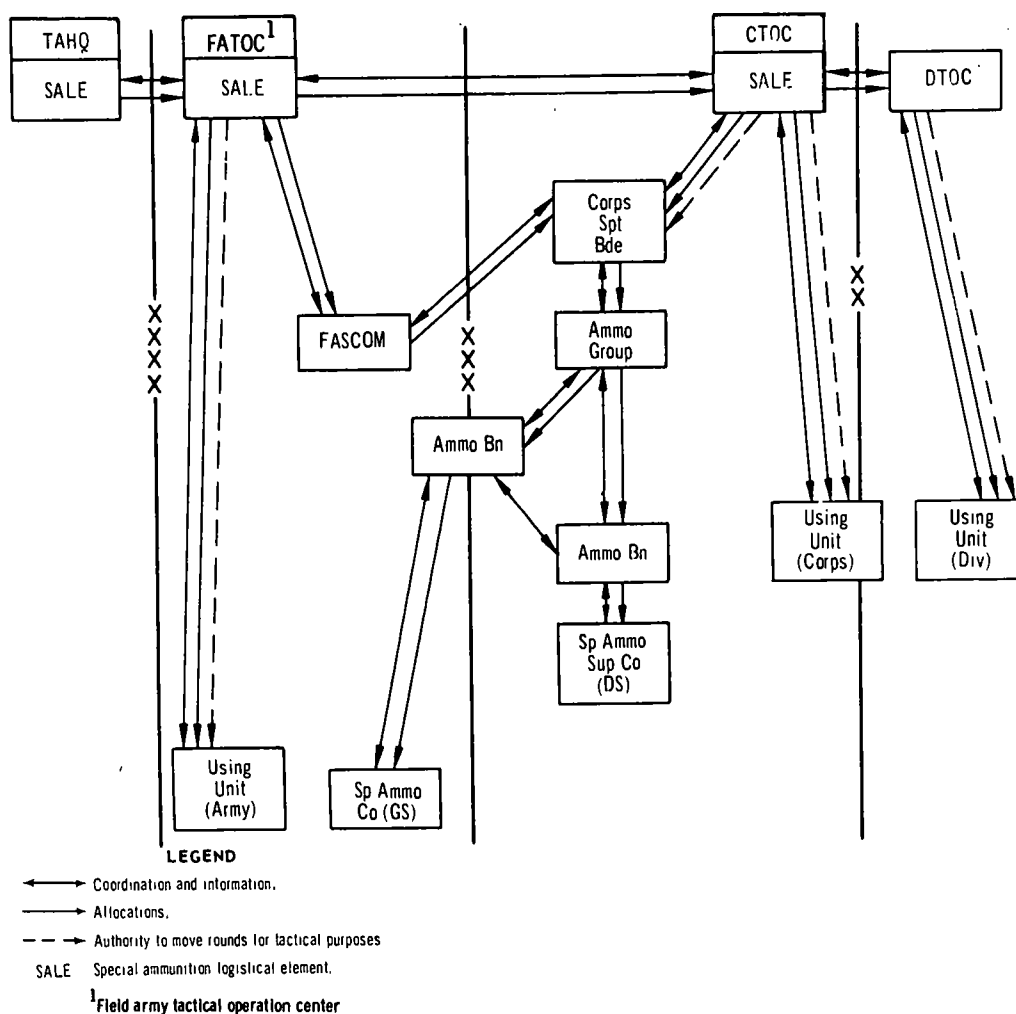


Figure 9-14. Control of special ammunition in the field army (schematic).

tactical commander. A special ammunition logistic element (SALE) is formed at theater army or air defense brigade headquarters, and at field army and corps tactical operations centers (TOC). The SALE is designed to be immediately responsive to the appropriate tactical commanders in expediting the supply of special ammunition.

9-33. Class VI and Class VIII Supply

a. Paragraph 9-42 discusses Army and Air Force Exchange Service supplies.

b. Paragraph 17-1b(6) discusses medical supply.

9-34. Class IX Supply

Requirements and supply distribution for repair parts (fig. 9-15) follow a system similar to that for class II items.

a. Direct support and general support maintenance elements initiate requisitions for repair parts for submission to the support brigade MMC. The support brigade MMC releases stocks from one of the GS repair parts companies and coordinates the transportation requirement for movement. If none of the repair parts companies in the brigade have the required items or quantities on hand, the brigade MMC sends the requisitions to the FASCOM MMC. The brigade MMC, through cross-leveling operations, laterally transfers stocks from repair parts units having excess available stocks to repair parts companies requiring stock replenishment. The FASCOM MMC also can direct distribution of repair parts stocks within the support brigades.

b. Direct support maintenance units are the source of supply for repair parts requisitioned by the user. DS and GS units requisition all repair parts, including aircraft and missile parts, through supply channels.

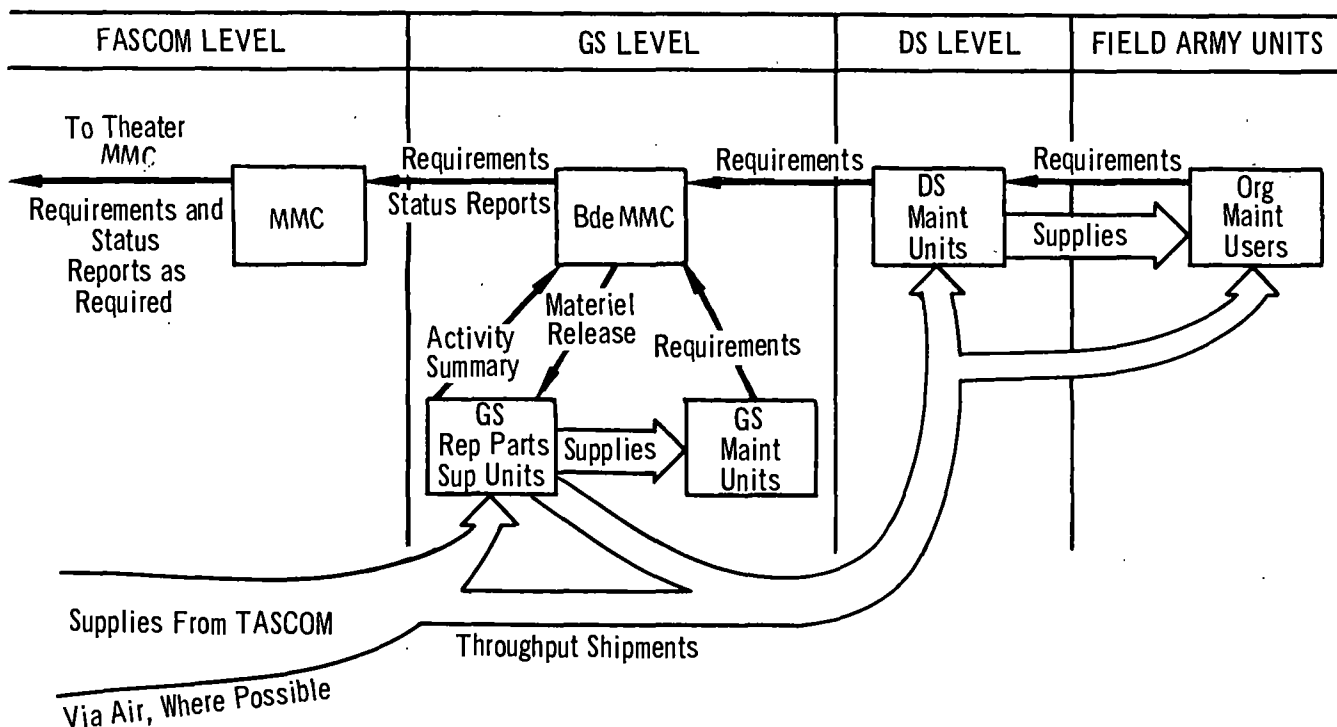


Figure 9-15. Flow of repair parts requirements and distribution (schematic).

9-35. Class X Supply

The distribution of materiel not included in Classes I-IX required to support non-military

programs, e.g., agricultural and economic development, is discussed in paragraph 9-40.

Section VII. SUPPLY, MISCELLANEOUS

9-36. Adjutant General Supplies

Adjutant general (AG) supplies consist of blank forms and publications. The AG supervises matters pertaining to printing (except map reproduction and printing for psychological operations (PSYOP)), including policy and procedure for control, production, and distribution of military publications. The AG pinpoint distribution system provides the issue of official publications to all units and organizations worldwide (AR 310-1). In addition, each item of equipment that is packed and shipped normally includes the initial issue of technical publications necessary for installation, operation, and maintenance of the equipment.

9-37. Air Force Supplies

The Air Force may be responsible for procurement and distribution of certain common supply items for all military services in a theater of operations. Theater air installations store such items. The air installations make authorized is-

sues to Army forces through the Army distribution system.

9-38. Animals

The procurement, requisition, and distribution of animals are responsibilities of the procurement activities of the various headquarters (except for test animals procured through medical channels for the Army Medical Department). Animal supply activities include requirements for dog teams in cold regions, guard dogs for installations in some areas, and mounts and pack animals in remote and isolated areas. Accordingly, animal supply activities are on an "as required" basis.

9-39. Captured Materiel

Captured materiel can be a source of logistic support, but it usually imposes an unprogrammed support burden on logistic troops. Procedures for proper handling and exploitation of captured materiel are contained in FM 30-5.

9-40. Supplies for Civilian Use and Consumption

a. Military sources may provide some supplies to the civil population if the resources of the territory are inadequate. Provision of military supplies will not be to an extent that jeopardizes military operations. In addition, civil agencies of the US Government and private charitable organizations may provide supplies for civilian consumption which may or may not be distributed through military channels. Supply in support of CA activities includes supplies for civilian relief and supplies for economic aid. Civilian relief supplies comprise such commodities as food, clothing, shelter, medical supplies, and other items furnished for control of disease and relief of civilian distress. Economic aid supplies consist of such items as coal, petroleum, capital goods, raw materials, railroad equipment, and fertilizers. Supplies and services may be necessary to establish or restore information services in the area (e.g., newsprint, printing facilities, radio broadcast and reception, motion pictures). The theater CA command or the CA brigades, performing CA operations in the field army area and the COMMZ estimate requirements and supervise distribution of supplies. The civilian economy may be a valuable source of essential supplies, and this factor is a consideration in assigning priorities to civilian supply requirements.

b. The TASCOM performs procurement and stockage of CA supplies in accordance with the theater policies. Civil affairs supplies are a consideration in making allocations of shipping and storage space.

c. For details on CA supply, see FM 41-10.

9-41. Psychological Operations Supplies

Face-to-face persuasion, radio, television, motion pictures, printed matter, and loudspeakers are media for conducting PSYOP. Equipment and expendables may come from either U.S. or indigenous sources; in either case, the supply problems are unique (FM 33-1).

a. *United States Sources.* Much of the equipment found in TOE 33-500, Psychological Operations Organization, is nonstandard.

b. *Indigenous Sources.* Experience indicates that U.S. Army PSYOP organizations will continue to make extensive use of indigenous supplies and installations. Planning should include the lo-

cation, types, and condition of local facilities—such as radio stations and printing plants—that may be rehabilitated and used by US forces. Planners weigh the availability of usable local resources against the task of transporting US equipment to the area of operations.

9-42. Religious Supplies and Equipment

Two categories of supplies and equipment are available to chaplains. Standard supplies and equipment, such as altar brass, portable altar sets, communion sets, wine and candles, come through normal supply channels. Nonstandard supplies—commercial items that are not type classified—come from appropriated and nonappropriated funds and donations.

9-43. Special Services and Exchange Supplies

a. Special services supplies consist of items used in the welfare, recreation, and morale program for service personnel (e.g., athletic equipment and small games kits, books and library supplies, musical instruments and replacement parts, theatrical equipment and accessories, crafts equipment and tools, model kits and materials, photographic equipment and supplies, radio and television equipment, and motion picture equipment). Each unit normally takes overseas an initial supply of special services equipment, accessories, and repair parts. Resupply is by requisitioning through supply channels.

b. Army and Air Force Exchange Service supplies consist of items for sale to troops and other authorized individuals. Supplies may be available through local procurement, through transfer from theater stocks, or through requisition to the Army and Air Force Exchange Service in the CONUS. Available shipping space dictates allocation and shipment of supplies to the theater. The Army and Air Force Exchange Service determines requirements; procures, stores, and distributes supplies; and operates the resale facilities.

9-44. Information Supplies

Information supplies consist of items necessary to support information programs and to provide education services. These supplies include printed materials, motion pictures, radio, and television broadcast stations, receiving equipment, and transcriptions. Most items come through normal supply channels. In some cases, procurement, storage, maintenance, and distribution of these supplies are through special channels and facilities.

9-45. Excess and Surplus Supplies

Excess supplies are those that exceed the quantity authorized for a particular organization, supply installation, activity, or area. Surplus supplies are those over and above the requirements of all government agencies.

a. Excess supplies may result from changes in plans, or unanticipated decrease in demand or consumption. Units segregate, inventory, and report their excess supplies to the next higher echelon in the supply chain. Determination and elimination of excess supplies are continuing functions of each unit and supply establishment. Evacuation and redistribution of excess supplies are through normal supply channels.

b. Units report and dispose of surplus property in theaters as prescribed in appropriate regulations.

9-46. Salvage

Salvage is property that has some value in excess of its basic materiel content but which is in such condition that it has no reasonable prospect for use, for any purpose, as a unit; and its repair for use as a unit is clearly impracticable.

9-47. Topographic Operations

a. Theater headquarters receives topographic requirements and establishes theater map coverage by scale on the basis of operation plans and resources. The topo control team at engineer command, normally receives TASCOT requirements for action and assigns responsibility to the engineer army topographic battalion which provides DS map distribution to Army elements and attaches technical teams to engineer brigades, to provide other designated services (e.g., extension of control, and situation overlays) in the COMMZ.

b. The engineer army topographic battalion maintains inventory control for theater map stockage. Data transmissions between the field topographic teams and the army battalion should use the MMC communications channels. To decrease response time in filling requisitions and to improve use of resources the topographic teams within the theater will produce additional map sheets as directed by the army topographic battalion.

c. Distribution of maps to TASCOT users is accomplished through map distribution teams es-

tablished by the engineer army topographic battalion in the theater support group of the TAACOM. Bulk distribution of maps to the field army is by throughput to the field army general support or direct support units (GSU/DSU).

d. Equipment and expendables for topographic operations may come from either US or indigenous sources; in some cases procurement, storage, maintenance and distribution of these supplies are through special channels and facilities. Maintenance of equipment should be accomplished by repair personnel assigned to these teams and due to the uniqueness and limited volume of equipment, repair to the DS level should be authorized.

9-48. Water Supply

Potable water production is an engineer service. The engineer determines potable water requirements; finds, records, and develops water sources; treats water and dispenses it; coordinates inspection and testing procedures with the surgeon; and procures and maintains water supply equipment. The transportation service provides rail and over-water bulk transportation of potable water. The transportation service also establishes and operates the boiler-feed water supply points required for transportation service rail and marine operations. The surgeon inspects and approves water sources and tests and approves treated water. Water equipment capacities and data on computation of requirements for potable water and potable water equipment are in FM 101-10-1 and TM 5-700.

a. The ENCOM is responsible for furnishing potable and nonpotable water to installations in the COMMZ. The water supply company (TOE 5-67) assigned to the ENCOM provides nine water supply teams. The engineer construction battalion (TOE 5-115) provides two water points for supplying potable water for other units, as required. The ENCOM based upon COMMZ requirements installs water supply systems, and RPMA units, under the operational control of ENCOM, maintain these systems. The area support group, TASCOT, provides the resources to transport potable and nonpotable water to the area.

b. In the combat zone, corps and field army engineer combat brigades provide water purification support as part of their GS mission.

c. When water must be delivered as a supply item, it becomes a mission of the DISCOM, the

FASCOM; or other appropriate support command organization to obtain water from approved water sources and to accomplish delivery.

9-49. Cryptologistics

a. The TACCOM performs the supply and maintenance functions with regard to cryptologic support of the theater.

b. See AR 380-41 for details on control of cryptomaterial.

c. For details on the maintenance of COMSEC equipment, see AR 750-1.

9-50. Supply for Stability Operations

Supplies for support of stability operations include materiel for U.S. forces and host country forces and for military civic action and other CA activities in support of host country internal defense and internal development programs. Supplies and equipment may come from U.S., Allied, or host country sources. Procurement of supplies from host country sources is coordinated with responsible CMO staff sections and CA units.

a. Supply planners will not have valid experi-

ence data for the wide variety of environments in which stability operations may be conducted. There is a need for development of consumption factors, basic loads, stockage levels, and basis of issue. There is also a need for development of similar factors for Allied and host country forces that may be supported wholly or partly from U.S. military stocks. Planners give early consideration to needs for special items. When practicable, local procurement will be used to reduce transportation requirements.

b. It will be necessary to establish and maintain stockage levels of supply at echelons below those where such stockage is normally maintained. Static security posts and combat bases are examples of installations where stockage will be necessary on a continuing basis.

c. The US forces may be required to provide essential supplies to the civilian population. The population may include victims of insurgent attack and groups that have been relocated or concentrated for security reasons. Supply will normally be limited to food and medical supplies, but may include such necessities as clothing, construction materials, and fuel.



CHAPTER 10

LOGISTICS—MAINTENANCE

Section I. GENERAL

10-1. Introduction

a. Maintenance Tasks. Maintenance is action taken to keep materiel in a serviceable condition or to restore it to serviceability. It includes inspection, testing, servicing, classification as to serviceability, repair, overhaul, rebuild, and reclamation. Maintenance also includes repair actions taken to keep a military force in condition to carry out its mission; and the routine, recurring work required to keep a facility (plant, building, structure, ground facility, utility system, or other real property) in such condition that it can operate continuously at its original or designed capacity and efficiency for its intended purpose. A discussion of real property maintenance activities is found in chapter 13. The maintenance function of combat service support includes plans and operations involved in maintaining materiel, and determining requirements for evacuation of unserviceable equipment. At the direct support maintenance level, the maintenance support mission also includes the responsibility to provide repair parts supply, direct exchange, and operational readiness float support to operating units. Inherent also is dependence on the capabilities and responsiveness of maintenance units in the field army to discern and report deficiencies in materiel and to recommend corrective action therefor, through appropriate channels, to the US Army Materiel Command wholesale logistic system.

b. Materiel Maintenance. The materiel maintenance activities of the Army in the field are those internal to theaters of operations and/or those performed by and in support of the missions of deployable commands, organizations, and units in CONUS or those deployed in oversea areas. Army in the field maintenance activities sustain the operational readiness of the force. They activate and operate the Army in the field portion of the maintenance support system, in accordance with the plans and equipment publications prepared by a national maintenance point (NMP), to maintain

in a serviceable condition materiel sufficient to satisfy prescribed operational requirements. Army in the field materiel maintenance activities are primarily concerned with the conduct and management of the support categories of materiel maintenance operations.

c. Maintenance Engineering. Maintenance engineering commences with the development of new materiel and continues until the equipment is phased out of Army use. The objectives of maintenance engineering are to insure maximum:

(1) Reliability—The probability that an item will perform its intended function for a specified interval under stated conditions.

(2) Availability—The degree to which an item is in the operable and committable state at the start of the mission, when the mission is called for at an unknown (random) point in time.

(3) Maintainability—The probability that an item will be retained in or restored to a specified condition within a given period of time when the maintenance is performed in accordance with prescribed procedures and resources.

(4) Maintenance support—Adequate repair parts, tools, test and handling equipment, maintenance manuals, and maintenance instructions for each item of equipment while achieving a minimum life cycle support cost.

d. Maintenance Management.

(1) Maintenance management is the judicious use of resources to accomplish maintenance objectives (para 10-2).

(2) Maintenance management includes determination of requirements for management, training, tools, test equipment, facilities, funds, repair parts, and other maintenance supplies.

(3) Periodic evaluation of maintenance concepts, policies, doctrine, plans, and procedures insures the most effective maintenance for tactical equipment. This evaluation also includes technical

supervision and management of major maintenance programs and activities.

(4) Maintenance management insures that adequate time is scheduled for maintenance operations and training, particularly preventive maintenance (FM 29-2).

e. Terminology. Commonly used maintenance terms are defined and explained in AR 310-25 and FM 38-5.

f. Enemy Action. Paragraph 2-3b discusses the effect of enemy nuclear, biological, and chemical operations on maintenance facilities and activities.

Section II. MAINTENANCE POLICIES AND PRINCIPLES

10-3. Maintenance Principles

a. Maintenance planning must be closely integrated and realistic with respect to current supply consumption rates and the availability of supplies. An inadequate maintenance organization imposes an increased requirement on the supply system. Conversely, inability of the supply system to replace unserviceable equipment requires greater maintenance effort to return a larger portion of these items to serviceable condition. Proper maintenance of equipment increases its period of economical usefulness, reduces supply requirements for replacement equipment, and conserves resources for other purposes. Effective maintenance support thus depends on responsive supply support.

b. The provision of maintenance support and maintenance supplies to using organizations by DS units is a basic logistic principle. Adherence to this principle results in fewer requisitions on supply depots. It also permits faster supply support to using units and improves inventory control. In addition, certain end items, e.g. tanks, are delivered through maintenance channels, permitting inspection to insure that these items are combat serviceable when issued. Procurement and storage of repair parts and end items, and their distribution to maintenance activities, are functions of supply agencies.

c. Maintenance organizations should maintain mobility and flexibility compatible with that of supported forces.

d. The maintenance system is most efficient when founded on sound preventive maintenance practices in using organizations. This includes

10-2. Objectives of Maintenance

The objectives of maintenance are to—

a. Predict, prevent, detect, and correct incipient equipment failures by timely preventive maintenance services and inspections.

b. Keep equipment combat ready.

c. Reduce requirements for replacement equipment.

d. Reduce repair parts resupply requirements by the repair of modules (components, assemblies, parts) to support the supply system.

correct operation and use of equipment, and early detection and correction of incipient equipment failures.

e. A system of recovery and evacuation is established for equipment (para 10-7b(3)). This system permits evacuation of an item from a using unit to the category of maintenance at which it can be repaired and returned to the user, to depot stocks, or salvaged. For items having high scrap value or requiring depot maintenance, the ultimate destination may be CONUS.

f. Dispersion of DS maintenance units is normally lateral and in depth to provide close maintenance support to units being served. As far as practicable, DS maintenance units support the same tactical units throughout an operation. This improves liaison, understanding, and cooperation between supporting and supported units. Direct support maintenance is performed as far forward as is consistent with the tactical situation, time available, capabilities of personnel, and availability of repair parts and tools. It is often more desirable to move maintenance personnel to the equipment than to move the equipment to maintenance personnel.

g. General support maintenance facilities normally are situated to facilitate repair of equipment beyond the capabilities or the capacity of DS units. Dispersion of GS units must be consistent with transportation resources for evacuation of unserviceable equipment and with the threat of enemy attack.

h. Depot maintenance is not normally performed in a theater of operations. If performed, such maintenance must be authorized by Depart-

ment of the Army and will be accomplished by TDA-type activities using local civilian labor and indigenous resources, and with U.S. military supervision. Normally, items requiring depot maintenance are evacuated to a CONUS depot (FM 29-24).

i. Direct support maintenance units provide technical assistance to users of equipment. Technical assistance service includes training in operation, use, and maintenance of equipment; and guidance in logistic planning, liaison, and delivery of new and replacement equipment and repair parts. The DA supply and maintenance technical assistance program (AR 700-4) establishes policies and procedures under which supply and maintenance technical assistance will be provided to major Army commanders and Army operational forces.

10-4. General Maintenance Policies

a. The Department of the Army has initiated Maintenance Support Positive (MS+) in order to limit piece-part repair at the lower levels of maintenance to the maximum extent practicable. Return of equipment to an operational status normally will be by replacement of modules. As a matter of general policy, maintenance will be allocated where it can be most effectively and efficiently accomplished while maintaining or improving readiness on a cost-effective basis.

b. Operational readiness floats (ORF) of end items of equipment provide a means for exchange of unserviceable equipment. Such floats maintain capabilities of supported units by providing replacement items for mission essential equipment not reparable within specified time limits. When the supply delivery date for replacement of an item lost, destroyed, or determined uneconomically reparable does not meet the operational requirement date, supported unit commanders may obtain a float item by submitting a statement indicating that the item is required by his unit to accomplish its mission. The theater army and field army commanders establish policies for the positioning of operational readiness floats within their respective commands, based on recommendations of their staffs and on policy provided by higher authority. Operational readiness floats are established for the exchange of mission essential items at the DS maintenance level, while repair cycle floats (RCF) are maintained by depots to compensate for a delay in the depot overhaul cycle. Materiel management centers (MMC) coor-

dinate repair priorities and the turn in of repaired end items or components to supply units or depots.

c. Direct exchange (DX) is the receiving of a serviceable item in return for an unserviceable item on a one-for-one basis without formal property accountability documents and with a minimum of paper work. The unserviceable item is repaired at the lowest feasible maintenance level and is returned to stock. Examples of such direct exchange items are components or subassemblies, such as vehicle generators, carburetors, and master brake cylinders. By applying the DX principle to higher levels of maintenance, the closed loop support system (CLSS) was developed. In conjunction with the RCF, this program provides an interface between the depot or wholesale system and the Army in the field. Depot capabilities are required to restore CLSS selected items of equipment to serviceability.

d. The issuance of equipment with the highest remaining service life to frontline units reduces requirements for maintenance in forward areas. If the situation permits, one method of reducing requirements for repair parts in forward areas is to locate older items of equipment in areas where higher categories of maintenance are more readily available.

e. Maintenance inspections determine the degree of serviceability and extent of repairs necessary. Except for DX items, when maintenance activities cannot repair an item within established time limits, or cannot replace an unserviceable item from the operational readiness float, the using unit turns in the item and receives a replacement through supply channels (FM 29-10, FM 29-20, FM 29-23).

f. Supporting maintenance units perform the maintenance function of supported units when required by practical considerations and authorized by the commander having jurisdiction over both the supported and supporting units. This procedure should be used with caution, because the performance of organizational maintenance by DS personnel results in degradation of the DS capability.

g. Evidence of abuse or of failure to perform assigned maintenance functions is reported to the proper commander for corrective action.

h. To the extent possible, a technical inspection is made of each piece of equipment, component, or assembly requiring repair to determine the extent

of repair necessary before beginning any repair or replacement of parts, components, or assemblies.

i. Controlled cannibalization is a source of supply for parts, components, and assemblies not immediately available from the supply system or for discontinued items for which no other source of supply exists (AR 750-1).

j. The Department of the Army establishes criteria and standards prescribing economical repair and overhaul limits for items of equipment. De-

viations are a matter of policy to be determined between the Department of the Army and major Army component commanders.

k. Excess, serviceable, or unserviceable economically reparable equipment is reported, disposed of, or shipped to designated maintenance or supply installations in accordance with instructions issued by the MMC.

l. Calibration and certification of testing and measuring equipment are functions of maintenance.

Section III. RESPONSIBILITIES

10-5. General

a. Individual Responsibilities.

(1) Individuals are responsible for equipment issued for their own use which is normally under their personal care or of which they are the assigned operators.

(2) Operators or users of equipment are responsible for proper preventive maintenance of assigned equipment before, during, and after actual operations.

b. Command Responsibilities. Commanders are responsible for—

(1) Insuring that equipment issued to their units or organizations is in a serviceable and combat-ready condition and that it is properly used, maintained, and accounted for.

(2) Advising higher commanders of their equipment replacement and maintenance support requirements.

(3) Complying with instructions and procedures for preventive maintenance operations, training their commands in preventive maintenance of equipment, and allocating sufficient time for performing preventive maintenance. Training in preventive maintenance is equal in importance to other military training.

(4) Assigning maintenance responsibilities for each item of organizational equipment to specific individuals.

(5) Preventing abuse of materiel under their control; investigating evidence of abuse and taking corrective action.

(6) Maintaining records on the usage, maintenance, and modification of certain items of equipment as prescribed in applicable regulations and directives.

(7) Insuring prompt evacuation of unserviceable equipment from using and maintenance units

or activities to a maintenance activity that has the capability to restore equipment to a serviceable condition.

(8) Designating an individual or staff element of the command as the unit logistics readiness officer. This officer has responsibility for coordination and supervision of materiel readiness functions of the command.

c. *Staff Officer Responsibilities.* Staff officers provide the commander advice and assistance in all phases of maintenance in their respective fields of interest. See FM 101-5 for specific responsibilities of staff officers.

10-6. Commanders' Responsibilities

a. Theater Army Commander. The theater army commander—

(1) Determines maintenance support requirements.

(2) Formulates plans and policies for provisions of maintenance support.

(3) Provides staff supervision over execution and implementation of maintenance plans and policies.

(4) Allocates maintenance units to major subordinate commands based on requirements, priorities, and availability of maintenance units.

b. Theater Army Support Command Commander. The TASCOCOM commander—

(1) Implements theater army plans and policies for providing—

(a) Overflow GS maintenance for field army maintenance units.

(b) The DS and GS maintenance for units and installations in the COMMZ.

(c) Evacuation to the CONUS of unserviceable, economically reparable items requiring

depot maintenance, in accordance with Department of the Army policies. When proper skills and facilities are available in the theater, depot maintenance may be authorized in the theater for designated end items and components.

(d) Acquisition, storage, and supply of repair parts required for maintenance of Army equipment in the theater.

(2) Provides staff supervision over maintenance activities.

(3) Assists theater army in determining maintenance support requirements.

c. Field Army Commander. The field army commander—

(1) Is responsible for maintenance of items issued to field army units.

(2) Provides staff supervision over execution and implementation of maintenance plans and policies.

(3) Allocates maintenance units to major subordinate commands based on requirements, priorities, and availability of maintenance units.

d. Field Army Support Command Commander. The FASCOM commander—

(1) Implements field army plans and policies for providing—

(a) The DS maintenance for field army units and designated units and installations of other commands located in the field army area. (Maintenance units organic to divisions accomplish DS maintenance, provide technical assistance, and furnish repair parts to divisional units.)

(b) The GS maintenance for items evacuated by divisional DS units and the GS maintenance for field army units and designated units and installations of other commands located in the field army area.

(c) Staff supervision over maintenance activities.

(2) Determines through inspections the adequacy of maintenance in the field army.

(3) Advises the TASCOC of field army requirements for maintenance support for current and future operations.

e. Corps Commander. The corps commander is responsible for maintenance of items issued to corps units.

f. Corps Support Command Commander. The COSCOM commander—

(1) Implements plans and policies for providing—

(a) General support maintenance for the supported corps' assigned and attached units, and direct support maintenance to nondivisional units (excluding separate brigades).

(b) Acquisition, storage, and issue of maintenance supplies required for the COSCOM mission.

(c) Staff supervision over maintenance activities.

(2) Determines through inspections the adequacy of maintenance support for current and future operations.

Section IV. MAINTENANCE CATEGORIES

10-7. Categories

There are four categories of maintenance operations—organizational, direct support, general support, and depot—which are discussed in *a*, *b*, and *c* below. The purpose of this categorization is to relate maintenance to other military operations, to provide organization to the system of maintenance in the field, to facilitate assignment of maintenance responsibilities to specific levels of command, and to permit orderly and efficient distribution of maintenance assets. The mission of a particular unit or organization, the complexity and bulkiness of the items of equipment, the operational location of the unit, and requirements for constant readiness dictate the category of repairs authorized the unit or organization. Maintenance allocation charts for equipment assign functions

and repair operations to the lowest appropriate category (AR 750-1).

a. Organizational Maintenance. Each combat, combat support, and combat service support unit, organization, or activity is authorized an organic materiel maintenance element (i.e., operator/crew and maintenance personnel) to perform authorized organizational maintenance operations on equipment assigned to or used by it to accomplish its mission. For some equipment, e.g., selected items of medical materiel, all authorized maintenance operations are allocated to the organizational maintenance category. Also, certain units, organizations, activities, because of the design characteristics or limited distribution of their principal items of equipment or operational requirements, are authorized an organic capability

to perform maintenance operations normally allocated to the direct support maintenance category.

b. Support Maintenance.

(1) Combat service support units are authorized in the Army force structure to provide direct support and general support maintenance service to the Army in the field. To the maximum extent practicable, these units are functionalized, i.e., organized to perform specialized maintenance tasks on equipment of several commodity groupings.

(2) Within each major level of command, support maintenance units are normally assigned to a support element whose commander has been delegated responsibility for the operation of the logistical support structure of the command. Materiel management centers, supported by ADPE and established within the appropriate staff section of these elements or designated as the supporting MMC, assist these commanders in the management of their support maintenance operations.

(3) Direct support maintenance operations are performed on equipment in the direct support unit area or, wherever it is practical and cost effective, at the site of operation or failure. This category of maintenance is limited to the repair of end items or unserviceable assemblies in support of using organizations. Extensive use is made of highly mobile contact teams from the support maintenance units in this effort. "One stop" service, to the extent practicable, is the goal of direct support maintenance. In furtherance of this goal, DS maintenance units serve as the supply system outlet for repair parts required by the using units to perform authorized organizational maintenance tasks. They also maintain operational readiness float stocks to assist in maintaining the requisite degree of materiel readiness in supported units, and serve as primary reentry points for unserviceable reparable equipment to the theater supply system. Unserviceable reparable items will not usually be held at DS maintenance unit locations if they are not to be repaired and returned to the user, DX, or float stock at that level. Evacuation or disposition instructions for items which are not reparable at DS level (fig. 10-1 and fig. 10-2) are normally provided by the appropriate logistic or materiel management center.

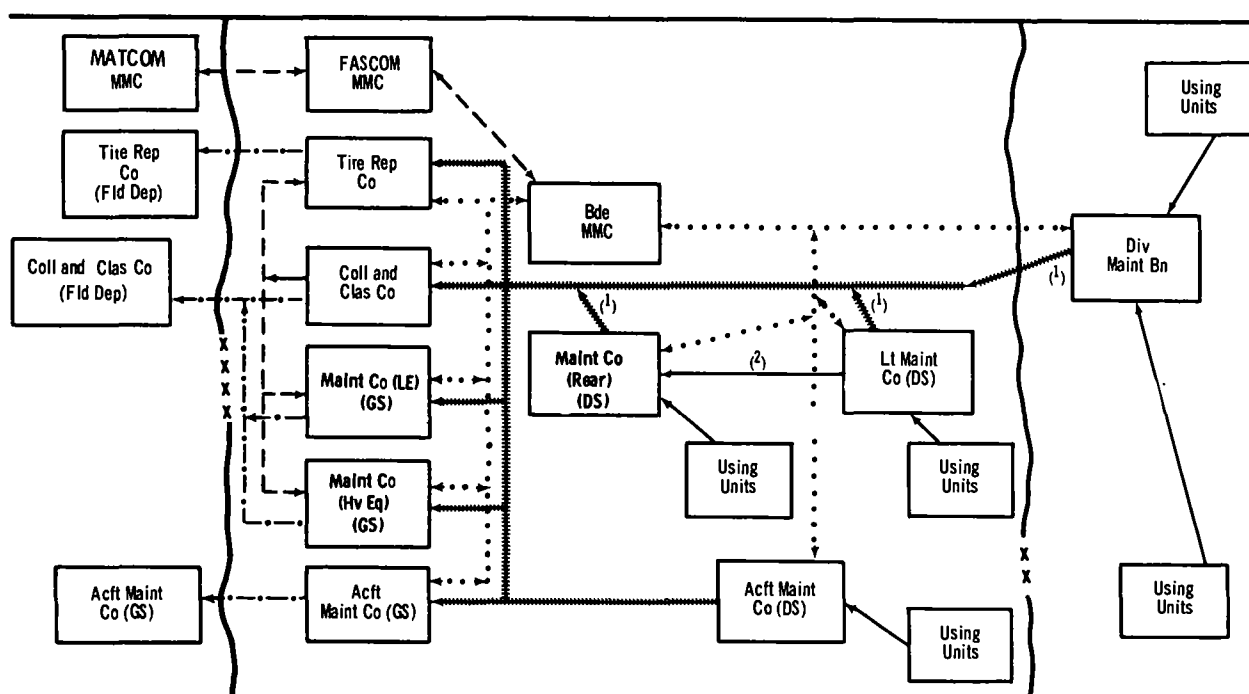
(4) General support maintenance operations are primarily aimed at the repair of unserviceable items of equipment for return to the theater stocks or at support of the DX system. For the most part, the workload of GS maintenance units consists of items evacuated by DS maintenance

units; however, work is also received from collecting points operated by collection and classification companies. Also, GS units may be required to perform GS-level maintenance on items being stored by supply units. Further, in exceptional circumstances, GS maintenance units may be required to perform GS-level maintenance directly to operating units by the use of mobile teams. For example, repair of certain items of fixed or emplaced equipment allocated to the GS level of maintenance can be performed more speedily and with less effort in place than if the items were removed from service and evacuated to the GS level. Items repaired by GS maintenance units may consist of complete end items which are repaired on a "job-shop" basis; however, most of the GS unit workload will consist of unserviceable modules (components, assemblies, subassemblies and parts). Some of these unserviceable modules are repaired as they are received; however, for maximum efficiency and production, such unserviceable reparable assets may be accumulated pending a repair program scheduled by materiel managers at the appropriate level.

c. Depot maintenance operations support the overall DA inventory management program. They are used as an alternative or supplement to new procurement as a source of serviceable assets to meet DA materiel requirements. Programs for the depot maintenance of materiel—except those for the repair and return to Reserve component users of equipment—are approved by HQ, DA and controlled by national level materiel managers under the monitorship of the Deputy Chief of Staff for Logistics (DCSLOG), DA. The Reserve components repair and return-to-user depot maintenance program is controlled by the Reserve components and coordinated with DCSLOG, DA. Oversea theater commanders with depot maintenance missions participate in formulating depot maintenance programs for the execution of which they will be assigned responsibility. Approved depot maintenance programs are executed by designated Army arsenals and depot maintenance facilities; by agreement with other military services; and by contractual arrangement with commercial firms. Such repair programs are planned and scheduled based on the needs of the supply system and the DX program, and in accordance with the availability of the requisite repair parts and other maintenance resources.

10-8. Repair Parts Supply

a. Those combat support units that have a DS



LEGEND

- Evacuation from using units to direct support maintenance units.
- Evacuation of items beyond the repair capability or capacity of direct support maintenance facilities to general support maintenance or collection facilities. The MMC provides the evacuation destinations, based on types of items being evacuated and the workloads of general support maintenance units.
- - - - - Flow of information and instructions relative to types of items requiring evacuation to a higher support category, condition of materiel, and disposition instructions.
- . - . - Overflow general support and items requiring depot maintenance.
- - - - - Flow of repairable materiel from the collection and classification company to maintenance units.

¹In general, items directed to the collection and classification company consist of economically repairable end items (less aircraft, small arms, and instruments) requiring general or depot support maintenance and those uneconomically repairable end items containing serviceable or repairable components or parts that are to be reclaimed. The bulk of items evacuated from direct support maintenance units consists of unserviceable components, which are normally directed to the appropriate general support maintenance company for repair. Small arms and instruments, items requiring general support-level modification work order application, and end items sent to the general support level for repair and return to the direct support level also are evacuated directly to the appropriate general support maintenance unit. Aircraft end items and components are evacuated directly to the aircraft maintenance company (general support).

²Evacuation for backup direct support maintenance.

NOTE: This figure depicts only the evacuation of unserviceable class II, VII, and IX materiel supported by direct support and general support maintenance battalions. It does not depict the evacuation of scrap and other items evacuated through salvage points, aircraft evacuated through aircraft maintenance channels, ammunition and missile system items evacuated through ammunition channels, medical materiel evacuated through medical equipment maintenance units, cryptomaterial evacuated through crypto channels, and foreign materiel evacuated as directed by technical intelligence agencies. Although not depicted in this figure, direct support maintenance units return repaired items to using units or to direct support unit maintenance float or direct exchange stocks; general support maintenance units normally return repaired items to the supply system.

Figure 10-1. Evacuation flow of unserviceable class II, VII, and IX items supported by direct and general support maintenance battalions (schematic).

maintenance capability for certain items of equipment that are essential to the continuity of their missions (e.g., certain signal units), will receive, through DS maintenance units, the repair parts and other items of supply used in performing DS maintenance on such items.

b. When authorized, maintenance support organizations (DS/GS/Depot) may use controlled cannibalization as a source of supply for repair parts in accordance with the provisions of paragraphs 4-33 through 4-45 of AR 750-1. Within the criteria established by this regulation, cannibalization at the direct support maintenance level is limited to:

(1) The exchange of serviceable/unserviceable modules or parts between like items of unserviceable economically repairable equipment.

(2) The exchange of serviceable/unserviceable modules or parts between an unserviceable economically repairable item of equipment and a like item of unserviceable uneconomically repairable equipment.

(3) The exchange of unserviceable uneconomically repairable modules and parts from the assets of the direct exchange program for like items of serviceable or unserviceable economically repairable modules or parts from unserviceable uneconomically repairable end items.

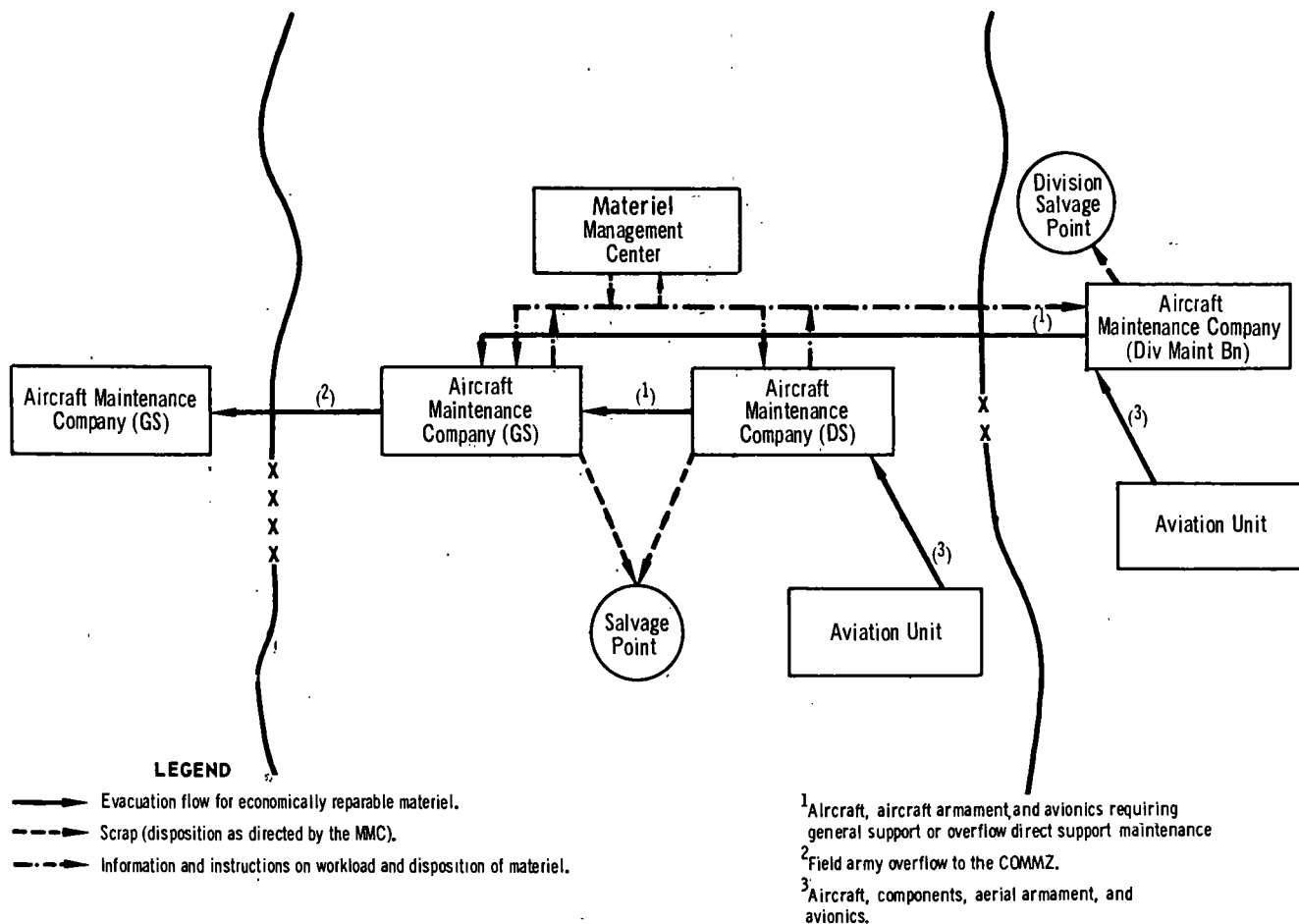


Figure 10-2. Field army aircraft evacuation channels (schematic).

c. Maintenance units store minimum levels of supplies, based on appropriate selective stockage criteria, operational requirements, available transportation, and enemy capabilities.

d. Appropriate maintenance units store and issue repair parts, components, and assemblies that are in recurring or anticipated demand and that meet one or more of the following criteria:

(1) Repair parts for special purpose equipment for which specific maintenance organizations have maintenance responsibility.

(2) Mechanical, electrical, or electronic

equipment requiring relatively complicated maintenance in storage, in transit, or at time of issue.

(3) Critical items of equipment that require decision on whether repair, replacement, or salvage is the most practicable course of action. The basis for this decision is knowledge of maintenance workload and availability of repair parts and replacement items.

e. Three significant features of the Army field stock control system govern supply operations in maintenance organizations. These features are selective stockage, stock accounting records, and demand data (AR 710-2).

Section V. MISSILE SYSTEM MATERIEL

10-9. General

a. The technical design and tactical employment concept of each system determine logistic support concepts for artillery missile systems. This section states the general principles of missile maintenance and supply, recognizing the requirement for significant deviations from conventional logistic support concepts. Detailed missile support coverage is contained in FM 9-6.

b. The critical requirement for immediate reac-

tion by artillery missile units necessitates the development of logistic support procedures that are immediately responsive to artillery commanders.

c. Material in this section is applicable to missile system materiel, both air defense and field artillery, and corresponding ground support equipment. Policies relating to air defense artillery and field artillery missiles are not always compatible because of differences in missions; this section points out qualifications wherever these differences exist.

d. Bases for the determination of maintenance concepts and functions for each missile and fire distribution system are: concept of tactical employment of the system in the field army; the inherent characteristics of electronic equipment; overall manpower requirements; comparison of dollar cost of components, assemblies, and repair parts; and an analysis of operational availability versus support efficiency.

10-10. Maintenance Criteria

Consideration of the following criteria is essential in determining maintenance functions to be performed by the user:

a. Availability of trained personnel in the using unit to perform required checks and adjustments, to analyze malfunctions, and to locate and correct troubles.

b. Accomplishment of repair or replacement as close to the origin of failure as possible.

c. The maintenance design philosophy on which the missile system is designed (component, subassembly, assembly, or section replacement). Test equipment and repair parts must be consistent with this design philosophy.

10-11. Categories of Maintenance

a. Direct support maintenance may be organic to the missile-firing unit or provided by missile support elements furnishing support on an area basis.

b. The operational requirements and sophisticated equipage of certain missile systems dictate that maintenance functions required to maintain systems at peak operational readiness be performed at the operational site. This maintenance capability must include the skills, tools, test equipment, and repair parts required to accomplish immediate in-position repairs of the missiles and their associated firing and control equipment.

Such a capability can be realized by providing for an organic DS element or by proper alignment of maintenance functions in maintenance allocation charts.

c. Normally, general support maintenance is provided by a guided missile maintenance company/detachment, GS, augmented with additional capability if necessary. In general, the four categories listed in paragraph 10-7 are applicable to maintenance support of missiles and their associated firing and control equipment.

(1) *Organizational maintenance.* Encompasses those services designated in the applicable Department of the Army technical manuals to be performed by operator and/or organizational maintenance personnel. Services normally authorized for accomplishment by missile system equipment operators include use, preservation, lubrication, adjustment, minor repairs, limited testing and replacement of simple repair parts and assemblies. Services normally authorized for accomplishment by missile system organizational maintenance personnel include all operator type services and additional maintenance functions requiring the use of allocated special tools and test equipment to locate and correct equipment malfunctions. These corrective actions normally include the replacement of assemblies, subassemblies, and limited quantities/types of components. On some missile systems, organizational maintenance personnel also perform as equipment operators.

(2) *Direct support maintenance.* Functionally trained personnel perform DS maintenance. These personnel have a knowledge of components of the specific system and have a larger assortment of repair parts and more precise tools and test equipment than those available for organizational maintenance.

(3) *General support maintenance.* Trained personnel perform GS maintenance when the time factor allows limited rebuild of assemblies, components, and end items.

(4) *Depot maintenance.* The service depot or manufacturer's installation performs depot maintenance. This is the highest echelon of maintenance, covering major overhaul or complete rebuild of components, assemblies, or end items; and employing production-line and assembly-line methods.

10-12. Responsibility

Missile-firing unit commanders are responsible for maintenance of their missile systems. They

execute this responsibility through efficient utilization of organic maintenance capability and by

placing support requirements beyond organic capability of designated support units.

Section VI. INSPECTIONS AND STAFF VISITS

10-13. Inspections

a. General.

(1) Inspections are the means by which commanders ascertain serviceability of equipment and promote efficient maintenance.

(2) All inspections of equipment and maintenance operations are under command authority.

(3) Supply and maintenance personnel of supporting units and activities assist commanders in performing inspections to ascertain adequacy and effectiveness of organizational maintenance.

b. Maintenance Assistance and Instruction Team Program. The maintenance assistance and instruction team (MAIT) program replaced the command maintenance management inspection (CMMI) program. The purpose of the MAIT program is to emphasize maintenance assistance and instruction and to provide commanders the necessary tools for assisting subordinate units in the

attainment of a high state of readiness. Visits to units will be informally scheduled and followup visits will be made as required (AR 750-51).

c. Reports. The inspecting agency prepares inspection reports, and the commander initiates corrective action when necessary.

10-14. Staff Visits

Maintenance staff visits under command authority determine whether maintenance doctrine, policies, procedures, and instructions are adequate. These staff visits also determine adequacy of the following:

a. Training of personnel in operation, use, and maintenance of equipment.

b. Tools and test equipment.

c. Maintenance support.

Section VII. MAINTENANCE SUPPORT OF STABILITY OPERATIONS

10-15. General

The administration of large-scale maintenance programs in support of stability operations is complex. In addition to maintaining US Army equipment, it may be necessary to support the host country's maintenance system, which may include foreign and obsolete equipment. Decentralized operations and limitations on movement imposed by the security situation create additional problems. It is desirable that maintenance shops be permanent structures, properly equipped, and staffed with qualified repairmen. Proper scheduling insures that needed items are repaired in an order of priority. Preventive maintenance is essential and depends on a comprehensive schedule of inspections (including technical and spot-check inspections by maintenance organizations, inspections by commanders, and supplemental inspections of host country maintenance by US Army advisers) and on a system of immediate repair or replacement.

10-16. Maintenance Problems

a. In stability operations, large-scale diversion of military repair parts and supplies to the civil-

ian economy through pilferage may become a difficult problem. The host country may lack adequate accounting controls, or employ deficient control procedures at railheads and equipment collecting points.

b. Maintenance failures are often attributable to lack of command emphasis on adherence to prescribed procedures. Implementation of corrective action and maintenance inspections to check the progress of corrective action will contribute to successful maintenance procedures.

10-17. Preventive Maintenance

The nature of stability operations precludes elaborate maintenance support; therefore, there is need for a high level of preventive maintenance and responsive backup support. Preventive maintenance is vital in areas where adverse weather and terrain conditions necessitate more than normal maintenance and where supported indigenous forces are not fully familiar with the importance of maintenance.

10-18. Contact Maintenance

Direct support repair teams may accompany

combat and combat support units to provide on-the-spot minor repairs and limited direct exchange. Mobile maintenance teams from combat service support units should be available to using units to assist in preparation for operations and in rapid recovery from completed operations. When maintenance services cannot accompany combat and combat support units, there must be provision for direct exchange of unserviceable items (such as weapons and radios) in selected stockage, positioned at security posts and combat bases.

a. Time should be available before and after

each mission to perform repairs and obtain replacement items.

b. The DS elements must provide rapid maintenance support at each static security post and combat base. Although primary emphasis is on repair by replacement (direct exchange), efforts will be made to repair items, short of performing complete overhaul or rebuild. Planning will insure that only fast-moving, high-mortality, combat essential items are included in the stockage of float items.

c. It will be necessary to evacuate or otherwise dispose of items that cannot be feasibly repaired at the DS level.



CHAPTER 11

LOGISTICS—TRANSPORTATION

Section I. GENERAL

11-1. Introduction

a. The scope of transportation encompasses movement of personnel and materiel, and the equipment, facilities, staff planning, and management necessary to accomplish such movement.

b. The commander of a unified or a specified command coordinates the air, sea, and land transportation means assigned to his command. He assigns responsibilities for the operation of air and water terminals in a theater of operations.

c. Control and allocation of transportation in the theater is under the staff supervision of the theater logistics directorate (J4). When required, the theater establishes a staff agency, the joint military transportation board (JMTB), to recommend allocation of theater transportation capabilities. The JMTB reports to the J4 and has representation from each of the military services and major joint forces in the theater and, when appropriate, from host and Allied nations. The chief of this agency is a member of the theater staff.

d. Theater army normally provides surface transportation support to theater air and naval components in addition to that provided to Army forces in the theater. Joint agreements and directives of the theater commander specify details of such responsibilities to air and naval elements. The theater army commander normally assigns responsibility and resources for surface transportation support to TASCOT and field army commanders.

e. The extensive requirements for military transportation in the theater of operations have a heavy impact on the civilian economy and population in the area. Transportation planners must coordinate with host and Allied nation transportation authorities, and with the ACofS, Civil-Military Operations, to insure minimum interference between military and civilian transportation. While civilian transportation assets will be used

to assist the military transportation effort, planners must provide transportation capability to meet essential civilian needs.

11-2. Transportation Service

a. Transportation staff specialists are authorized in the staff sections of the ACofS, movements in the TASCOT, FASCOT and corps support brigade headquarters. They are also integrated into ACofS, G4 staff elements in corps and army headquarters; and in the ACofS, services, of field and general depots, theater army area commands, and area support groups. In the divisions the transportation officer is on the special staff of the division headquarters. These staff officers are responsible for technical supervision of the transportation service required by the command. The transportation command and the transportation brigade provide transportation services in the TASCOT and the FASCOT, respectively. A motor transport battalion provides truck transportation support in the support brigade.

b. Transportation capability available to the theater army commander may include Army elements and elements of other military services and agencies.

(1) *Army elements.*

(a) Transportation units.

(b) Army aviation units.

(2) *Other military services and agencies (support).*

(a) Navy intratheater ocean and coastal shipping.

(b) Ocean shipping operated or controlled by the Military Sealift Command (MSC).

(c) Air transportation operated by theater air force or theater navy. For doctrine on combat service support airlift, see FM 100-27.

(d) Air transportation operated or controlled by the Military Airlift Command (MAC).

(e) Local civilian transportation services and facilities.

11-3. Basic Principles

a. Organization of transportation support provides for management and coordination of various modes of transportation (except pipelines) and integration of available civilian transportation capabilities into movement plans and programs. Integration of all modes of transportation into one system accomplishes the movement mission.

b. Transportation support serves the theater as a whole and must have a high degree of flexibility to permit necessary diversion, concentration, and allocation of transportation. Flexibility is of particular importance in nuclear operations. The system is centralized in direction and decentralized in execution to attain the desired degree of integration and flexibility.

c. Organization of transportation support must

take full advantage of all available transportation modes and resources.

d. Transportation for the evacuation of patients is a responsibility of the Army Medical Department. The Army Medical Department controls all field, bus, rail, and air ambulance transportation resources for the evacuation of patients within a theater of operations. When additional transportation means for the evacuation of patients is required, the Army Medical Department is dependent upon the Air Force, the Navy, and/or the Army command controlling other forms of transportation. The medical command commander will continuously forecast the land, rail, air, and water transportation requirements for patient evacuation.

Section II. MOVEMENTS MANAGEMENT

11-4. General

Movements management, a function of the staff movements officer, provides for the best use of transportation resources in the movement of supplies and personnel. Movements management involves two major functions—transportation movements and highway regulation.

11-5. Transportation Movements

Transportation movements are concerned with planning, coordination, programing, and supervising the allocation and use of the available transportation resources to meet the movement requirements of the command. To accomplish this, movement control centers (MCC) are established at major support command headquarters, and transportation movement offices are established at depots, terminals, and other critical points in the transportation system throughout the theater as required.

11-6. Highway Regulation

Highway regulation is concerned with planning, scheduling, routing, and directing the use of the highway net available to the command to realize the net's maximum potential. This regulation is accomplished by establishing a highway traffic headquarters that plans and coordinates for the major commands having area jurisdiction; and by establishing highway regulation points in coordination with the military police and traffic control posts to provide information to the highway

traffic headquarters and to supervise the implementation of its plans.

11-7. Control of Movements

The commander charged with providing combat service support (i.e., theater, theater army, field army, and independent corps) exercises centralized control of movements. The echelon of command that has knowledge of the total requirement and the total capability can best correlate movement requirements and capabilities.

a. The TASCOC MCC serves theater army, and as required, other US forces and host nation or Allied forces. As the central movements management agency, it prepares movement and port clearance plans and programs, conducts necessary liaison, supervises the activities of the field transportation movement offices, and insures proper use of available movement capabilities. In carrying out its functions, the MCC uses the capability of the automatic data processing unit assigned to the transportation command. The TRANSCOM is authorized units to staff the TASCOC MCC and highway traffic headquarters, transportation movements offices in the field, and highway regulation points.

b. The FASCOC MCC, the corps support brigade MCC, and their subordinate transportation movement offices accomplish movements management in the field army (except for the movement of bulk class III in pipelines). The MCC accomplish movement planning, prepare and supervise

the execution of FASCOM or support brigade movement programs, maintain an in-transit inventory of shipments, and maintain liaison with transportation movement agencies of the TASCOM, host nation, and other commands as required.

c. Details concerning transportation movements and individual responsibilities are provided in FM 55-1, FM 55-10, FM 55-11, and FM 101-5.

d. The Army Medical Department is responsible for providing transportation for the evacuation of patients. Additional transportation requirements for patient evacuation will be submitted by the medical command MRO to the movements control center (MCC) (e.g., request for locomotive power to move an ambulance train (rail)). For a detailed discussion on patient evacuation, see FM 8-10.

Section III. TERMINALS

11-8. General

a. Terminal operations comprise those functions for loading, unloading, and in-transit handling of personnel and cargo at or between origin and destination when transfer is necessary from one transportation mode or unit to another. Generally, classification of terminals is by principal transportation mode (railways, highways, waterways, oceans, and airways). Any terminal, regardless of classification or allocation, may perform embarkation or debarkation functions, or both.

b. Operation of terminal installations (except Air Force aerial ports and bulk petroleum facilities) and transfer points is a responsibility of the transportation command. At large, complex terminal installations, there may be a requirement for assignment of detachments or units from other military services. These units assist Army transportation agencies by providing technical advice pertaining to identification of items, special handling of certain items, and other matters of a technical nature.

c. For details on terminal operations, see FM 55-60.

11-9. Water Terminals

a. Water terminals include ports, harbors, beaches, and other portions of the coastline; and navigable inland waterways used for, or reserved for, the loading or discharge of troops and cargo. Water terminals normally are the means of entry into a theater of operations for the bulk of materiel and units shipped to the theater. One transportation terminal group can supervise the operation of a number of water terminals spread over a large coastal area. Each terminal is under the command of a transportation terminal battalion. Construction of water terminal facilities is an engineer service responsibility.

b. Construction of temporary facilities supplements or replaces permanent water terminals and achieves dispersion.

c. Control of ship arrivals at water terminals reduces concentration and possible loss. Discharge and loading of ships should take place at dispersed points within terminal areas. Rapid terminal clearance is essential. Only those depots and other installations essential to terminal operations should be in the terminal areas.

d. The following factors determine the number and loading of ships should take place at dispersible dispersion:

- (1) Friendly tactical and logistic situation.
- (2) Total terminal capacity required.
- (3) Enemy capabilities.

(4) The number, capacities, and proximity of ports, beaches, and other areas suitable for discharge of ships.

(5) Personnel and equipment available for establishing and operating terminals, including indigenous resources.

(6) Availability and proximity of highway or rail facilities for ease in terminal clearance.

e. It may be necessary to use only a portion of the capacity of established major terminals that afford protected anchorages and well-developed inland transportation systems. A few major terminals may provide sufficient total capacity, but the resulting concentration of shipping activity would present lucrative targets. For this reason, routing of the shipping load is not only through major water terminals but also through smaller terminals and unloading points (beaches). It is desirable that some of the terminals possess a capacity in excess of their planned use so that shipping can be quickly diverted in case of loss of terminal capacity elsewhere. Increasing the number of terminals increases the requirement for personnel and equipment to construct, maintain,

and operate terminal and beach facilities; to provide additional communications; and to construct and maintain additional road and rail facilities.

f. To speed and simplify handling, cargo is shipped overseas in unitized containers or pallets to the extent practicable. (The terminals must have suitable materials handling equipment to handle unitized cargo.)

g. Landing of personnel and cargo will be on beaches when port facilities are inadequate, or otherwise unavailable, or when the threat of hostile attack necessitates dispersion beyond the limits of established port facilities. Terminal units have the training and the equipment to operate beaches as well as ports.

h. The capability to clear supplies and personnel from terminals to inland destinations often is a limiting factor in military operations. Clearance capability is the primary factor in determining beach capacity. The amount of transportation devoted to and the adequacy of the beach exits leading to lines of communication are considerations when computing clearance capability. Hydrographic characteristics of the beach area, the weather, and topographic characteristics of the landing area also affect beach capacity. The availability of transportation assets and the capability of the inland destination to unload and return transport assets to the beach are limiting factors in logistics over the shore operations (LOTS).

i. Special-handling and floating equipment used in beach operations includes floating and mobile cranes, sectional steel pontoons, harbor craft, amphibious vehicles, landing craft, barges, tactical bridges, piers (barge type, self-elevating), rough terrain materials handling equipment, and other cargo discharge devices.

j. In present and foreseeable future logistics over the shore operations, amphibious vehicles and helicopters will perform movement of general cargo from ship to inland points. Their use permits movement of oceanborne cargo directly from ships to dispersed inland transfer points with no rehandling at the shoreline. Landing craft will be used as required between ship and shoreline or shoreline and shoreline. Where available, roll-on-roll-off shipping will transport wheeled and tracked vehicles overseas and will discharge the vehicles onto available beach discharge lighters or landing craft. Vehicles discharged from the lighters at the shoreline will move inland under their own power or by towing.

11-10. Air Terminals

a. Although Air Force units of the theater command normally operate the theater Air Force terminals, the MAC may operate some terminals within the theater of operations. The bulk of personnel replacements to the theater and rotatees from the theater move by air. Army transportation teams provide liaison between Air Force units operating terminals and Army units receiving personnel. Construction of air terminal facilities in the theater of operations is an engineer service responsibility.

b. The field army establishes and operates Army air terminals in the corps rear area and the field army service area to support Army air lines of communication. Facilities and services at these terminals provide the maintenance, movements management, and cargo transfer necessary to insure effective use of available aircraft in moving troops and supplies into and out of the airlift system. The senior officer of the aircraft units based at these facilities normally acts as terminal commander.

11-11. Motor Transport Terminals

Motor transport terminals, normally at both ends of a line haul operation, form the connecting link between local haul and line haul routes. Terminals provide vehicle dispatch service, main maintenance facilities, cargo transfer operations, and temporary holding areas for cargo backlogs and may contain, in whole or in part, trailer transfer facilities.

11-12. Rail Terminals

Rail terminals may include yard tracks, repair and servicing facilities, accommodations for train crews, and railheads. They are at originating and terminating points of trains and at sites that mark the limits of the rail operating divisions. A railhead is a small yard or terminal on or at the forward end of a military railway where troops, supplies, and equipment are transferred to other modes of transportation or distributed to using organizations.

11-13. Temporary Holding Areas

The transportation command establishes temporary holding areas in terminals for handling cargo en route over lines of communication. The principal purpose of these holding areas is to pro-

vide facilities for intransit cargo awaiting transportation. Facilities vary from open areas to large warehouses and elaborate rail, highway, water, or air facilities.

11-14. Transfer Points

a. The transportation command establishes transfer points where transfer of cargo from one means or unit of transportation to another is nec-

essary and where both means will be available simultaneously. A change of gage on a railway also requires transfer points. When cargo is transferred from a transport service to transportation belonging to the consignee, the consignee is responsible for handling the cargo.

b. Transfer points generally use transportation command units and have such equipment as cranes, roller conveyors, and other cargo handling equipment.

Section IV. WATER TRANSPORTATION

11-15. General

The chief characteristic of water transportation is economical movement of large volumes of cargo at relatively slow speed over great distances. Its utility relates to the adequacy of loading and unloading facilities and its vulnerability. Water transportation includes ocean, coastal, and inland waterway shipping.

11-16. Ocean Shipping

The MSC provides and controls ocean shipping. Primarily, the bases for military shipping requirements are number of troops, cargo to be transported, and length of the sea routes. Priority in shipping allocations to theaters of operations is in accordance with the overall strategic plan. A theater commander may prescribe ports of destination for vessels enroute to his theater. To meet requirements of the theater commander, the MSC may establish ship holding or diversion points to permit vessels entering the theater to be held or diverted at these points and moved to destinations as discharge facilities become available. The theater commander exercises control over ocean shipping allocated for intratheater use through MSC offices in the theater.

11-17. Coastal Shipping

The MSC, the US Navy, and, in some cases, the US Army operate coastal shipping. Coastal ships vary in size, but are normally shallow-draft vessels capable of operating in water areas where channel depths or maneuver area prohibits employment of deep-draft ships. Coastal shipping includes both self-propelled vessels and towed barges. A host nation monitors, and may control, all ship movements in its coastal waters.

11-18. Inland Waterways

a. The transportation command controls and

operates US military inland water transportation. Inland water transportation is comparable to rail transportation in its ability to carry large tonnage and heavy single loads, but it is slower. Inland waterways include lakes, rivers, and canals with adequate navigability to permit passage of barge traffic or river shipping. When present in a theater of operations, inland water transportation is a valuable means of moving bulk cargoes, such as coal, construction materials, and bulk petroleum products. Use of inland water transportation frees faster means of transportation for higher priority shipments. Integration of inland waterways into the transport network is a means of dispersing and expanding transportation capabilities.

b. Inland waterways normally extend inland or along a coastal area from a deepwater terminal, which serves as the base of operations for the inland waterway system. Considerations in planning, developing, and using inland waterways include—

(1) Seasonal floods and the drying up or freezing over of waterways.

(2) Availability of skilled indigenous personnel—such as bargemen, pilots, and tugboat operators—to augment transportation personnel.

(3) Amount and condition of military and local equipment and facilities.

(4) Types of barges or craft suitable for the waterways.

(5) Engineer service requirements (construction of bridges and removal of obstacles, channel depths, widths and heights of clearances, development of transfer points, and feeder rail and highway nets).

c. Inland waterway equipment includes lighters, barges, and towboats. Terminal facilities include piers, wharves, materials handling equipment, marine maintenance shops, and signal communications.

d. Inland waterways are extremely vulnerable to guerrilla activities. Destruction of locks, gates, floating equipment, siphons, aqueducts, levees, and

embankment walls can deny the use of individual inland waterways for protracted periods of time.
e. Paragraph 8-4f discusses riverine operations.

Section V. RAILWAYS

11-19. General

a. Military personnel or civilians under military direction construct, maintain, or operate the military railways of a theater of operations that support US or Allied forces (FM 55-20). The military value of railways lies principally in their ability to haul large tonnages continually over long distances at a uniform rate of speed. Rail transportation facilities (e.g., marshaling yards, large railroad terminals) present lucrative targets. Crowding of these facilities with rolling stock is to be avoided. Maintenance and repair equipment should not be concentrated in the yards. The enemy will probably attempt to destroy tunnels, deep cuts and fills, and bridges in the hope of paralyzing traffic throughout the rail net. Such interdiction may necessitate extensive repair and rehabilitation of rail lines essential to logistic support. Railways are extremely vulnerable to guerrilla activities.

b. Rail operations in a theater are classified as phase I, II, or III, according to the degree of military effort required. Phase I is operation by military personnel. Phase II is operation by military personnel augmented by civilians. Phase III is operation by civilians with minimum military supervision. In addition, a friendly government may provide railway service to US forces.

11-20. Operations

a. The operation of military railways in a theater of operations is a responsibility of the transportation command and its subordinate railway units. In a landmass theater, the basic responsibility for railway operation may be with the host nation. By agreement or treaty between the United States and the host nation, US military units will supplement the host nation capabilities.

b. The transportation railway service is responsible for the movement and maintenance of ambulance trains. The Army medical department is responsible for staffing hospital cars, loading and unloading patients, and providing care en route.

c. Commanders of terminals, railheads, and

supply activities are responsible for loading and unloading cars in the minimum time practicable. Railway cars are not used for storage, unless specifically authorized by the TASCOT commander.

11-21. Equipment and Facilities

a. Fixed railway facilities include bridges, tunnels, trackage, terminals, yards, stations, buildings, repair shops, and fueling and watering facilities. There are three general classes of railway equipment—motive power (locomotives), rolling stock (passenger and freight cars), and special equipment (piledrivers, cranes, and special maintenance equipment). The railway facilities make maximum use of civil railway equipment and personnel. These resources are obtained through CMO staff channels.

b. Diesel-electric locomotive repair companies and car repair companies perform general support maintenance on railway equipment and, normally, are located near important railway centers in the COMMZ.

11-22. Construction and Maintenance

a. Construction and maintenance of railways in a theater of operations are the functions of the ENCOM. Maintenance at the rail system is the responsibility of the transportation railway service. Responsibility for railway construction requirements rests with the TASCOT commander in coordination with field armies for projects within their areas. The great amount of time and the quantities of material required for new railway construction make it imperative to exploit existing railways. Reconnaissance and selection of railways to be rehabilitated are responsibilities of the transportation service in coordination with the engineer service.

b. The planning, engineering, installation, and maintenance of the military railway communications system is a function of the theater army communications command. Personnel organic to the transportation railway service operate military railway communications systems, which are constructed for their exclusive use.

Section VI. HIGHWAYS

11-23. General

a. Military highway transportation encompasses effective use of roadways and efficient operation of vehicles thereon. Military highways construction and maintenance of land lines of communication (LOC) in the theater of operations are engineer service responsibilities. For details on operation of convoys and military motor transportation, see FM 55-30.

b. Two forms of control—organizational and area—insure the most effective and efficient use of highways to support tactical and combat service support requirements.

(1) Highways in a specific area (e.g., the COMMZ or within the field army area) are under area control. Area control is superimposed on organizational control. It is used to the degree required to achieve orderly and effective movement of vehicles over the highway system. Control exercised by higher headquarters, such as theater army, the TASCOT, or field army, may extend only to the designation of intersectional routes or as established by standing operating procedures (SOP) for coordination of combat and COMMZ highway movement. Area control is a command responsibility under the staff supervision of the ACofS, movements.

(2) The commander of the organization using a road exercises organizational control to insure compliance with rules of the road and traffic regulations. Measures taken include prescribing schedules, speed, spacing, and routing; enforcing discipline; and providing for local security.

11-24. Traffic Control

Staff planning and coordination of traffic control are responsibilities of the ACofS, movements, in the TASCOT and the FASCOM; and of the ACofS, logistics (G4), in tactical commands. Military police units perform traffic control functions within assigned areas of responsibility in accordance with approved traffic control plans. They provide the commander with the traffic control capability required in moving scheduled and unscheduled combat, combat support, and combat service support vehicles; and in the unscheduled military and civilian movements as outlined in the highway regulation plan prepared by the command traffic headquarters.

11-25. Highway Traffic Regulation

Highway regulation is a responsibility of the commander having area jurisdiction. Planning, routing, and scheduling movements on the available road net are done in accordance with priorities established by the commander. Field army accomplishes highway regulation by establishing highway traffic headquarters at division, corps support brigade, and FASCOM levels. In the COMMZ, this is a function of the transportation command. Besides coordinating with the various other highway traffic headquarters, the transportation command headquarters coordinates all movements between the COMMZ and the field army with the TASCOT highway traffic headquarters.

a. *Corps Rear Area.* The support brigade highway traffic headquarters works closely with the corps staff, the support brigade staff, the MCC, the support brigade's motor transport battalion, and military police units. Its main function is planning and allocating time and road-space requirements on the highway net in the support brigade area. The support brigade highway traffic headquarters coordinates with division highway traffic headquarters on all movements entering or leaving the division area over controlled routes. It also exercises direct supervision over the highway regulation point team and pertinent reports received from military police traffic control posts.

b. *Field Army Service Area.* The highway traffic headquarters of the FASCOM performs essentially the same service for the field army service area that the corps highway traffic headquarters performs for the corps rear areas. There also may be a combined MCC to coordinate intersectional movement requirements with movement capabilities of joint commands, Allied forces, and the host nation. The FASCOM highway traffic headquarters coordinates with and influences the operation of both higher and lower command elements.

c. *Communications Zone.* In the COMMZ, traffic regulation normally is applicable only to the main highway supply routes and certain essential feeder routes. The highway traffic headquarters of the transportation command exercises control of routes. Requests for movement over those routes go to the highway traffic headquarters through local transportation movement offices, appropriate staff transportation offices, or highway regulation points.

Section VII. AIR

11-26. General

a. Air transport operations include those in which—

(1) Aircraft are available in specific numbers at a specific time and place for a specific mission.

(2) Aircraft operate on a recurring schedule between airfields.

b. Important characteristics of air transportation are high speed and relatively unlimited choice of routes within aircraft range. Aircraft that can use hastily prepared landing fields and air terminals may be available in forward areas in the early phase of an operation.

c. The requirement for friendly control of air routes, susceptibility to adverse weather conditions, and vulnerability to air defense and other ground fire influence air transportation operations. Load capacity, range, fuel consumption, and landing facility requirements are additional limiting factors.

11-27. Intertheater and Intratheater Air Transportation

The MAC normally provides air transportation between the CONUS and theaters of operations and between theaters of operations. Tactical airlift forces, other units of the theater air force, and Army aviation units provide combat support and combat service support airlift within the theater. Civilian transportation, both on common carrier and contract basis, may supplement military air transportation.

a. *Concepts in Logistical Air Support.*

(1) The Army in the field will rely on the MAC fleet with commercial augmentation provided by the Civil Reserve Air Fleet (CRAF) to meet intertheater airlift requirements.

(2) The Army concept envisions use of Air Force delivery of cargo as far forward as the tactical and logistic requirements and capabilities permit. Also, the concept calls for use of the Army helicopters to complement the Air Force fixed-wing air lines of communication (ALOC).

(3) The Air Force is encouraged to deliver cargo as far forward as practicable.

b. *Requirements and Allocations, General.* To insure adequate supply by air, commanders develop estimates of the types and amounts of materiel to be delivered on a sustained basis. This action is essential for determining aircraft, air

delivery equipment, and personnel requirements. Maximum benefits of supply by air can be attained only after analysis of land lines of communications, available airfields or drop zones at destination, availability of loading and unloading equipment and personnel, and the plan of operation. Supply by air should originate as far to the rear as practicable and directly proceed to the unit requiring the materiel.

c. *Intertheater Requirements and Allocations.*

(1) The military services and major joint forces submit requirements for intertheater air transportation to the theater J4 or the JMTB, when established. Requirements are evaluated and recommendations are submitted by or through the theater J4 to the theater commander. Upon approval by the theater commander, requirements go to the appropriate departments of the Department of Defense.

(2) After evaluation and inclusion in the overall requirements of the Department of Defense, the respective departments forward the requirements to the MAC. The MAC makes allocations to the oversea theaters through the respective departments of the Department of Defense.

(3) The theater commander suballocates intertheater air transportation to each of the military services and to major joint forces in the theater. Each service or joint force suballocates inbound and outbound intertheater airlift to its components.

d. *Intratheater Requirements and Allocations.*

Services and joint forces in the theater submit requirements for intratheater air transportation to the JMTB. The JMTB evaluates the requirements and submits recommendations to the theater commander through the theater J4. The JMTB also translates general policies and allocations of the theater commander pertaining to intratheater airlift into specific directives, to include designation of priorities, and establishes priorities by service or by type of cargo, as required. After theater component services and joint forces receive their airlift allocations, they deal directly with the area airlift force commander, establishing specific priorities within their allocations.

(1) *Theater army.* The theater army G4 recommends the use of air transportation in theater army. Based on requests from major theater army commands and the amount of airlift allocated to theater army, theater army makes alloca-

tions to these major commands. Because of the influence of airlift on tactical operations, the army group (when present) allocates air transportation to field armies. The theater army commander establishes priorities as required.

(2) *Theater army support command.* The TASCOM transportation command, under the staff supervision of the TASCOM ACoS, movements, is responsible to the TASCOM commander for movement planning and coordination of Air Force airlift allocated to the TASCOM. Intratheater airlift allocated to the TASCOM moves cargo and personnel both in the COMMZ and from the COMMZ to the field armies. Theater army may direct that a portion of the airlift allocated to the TASCOM be used to support each field army. The TASCOM transportation command consolidates requirements for airlift in the COMMZ and requirements for airlift in support of field armies. Based on these consolidated requirements, airlift capabilities, and established priorities, the transportation command prepares the air portion of the TASCOM movement plan.

(3) *Army group.* Field armies submit requirements for air transportation through army group. Requirements approved by the army group commander go to theater army. Theater army forwards allocations of air transportation to field armies through army group. Army group may adjust theater army allocations to field armies as required.

(4) *Field army.* Movement planning and coordination of intratheater airlift allocated to the field army are under the supervision of the field army G4. Allocations to field army are normally expressed as tonnage for air delivery. Within this allocation, the field army commander specifies the type of material to be delivered, the times for delivery, and destinations. Field army allocates available airlift to its subordinate elements based on previously submitted requirements. When conditions do not permit air delivery direct from the COMMZ, the TASCOM may attach appropriate specialized units to field army to provide this capability.

e. Delivery of Supplies and Equipment, General. Air supply in the theater of operations is an expeditious method and is integrated into the system at theater level. The increased mobility and dispersion of combat units make air movement not only desirable but often essential. The Army or the Air Force may provide the aircraft. Field armies, corps, and divisions provided Army aviation units should not consider these units availa-

ble for integration into the theater airlift system as normal employment. Air supply may be accomplished by landing the aircraft or by dropping supplies from aircraft in flight (parachute or freedrop).

(1) Air landing is the more desirable method of delivery, since it results in the least loss and breakage of cargo, reduces handling, and makes the most efficient use of airlift cargo space. Aircraft landing areas for fixed-wing aircraft normally require some preparation, depending on the area and the type of aircraft. The use of rotary-wing aircraft may require prepared sites with access roads, hardstands, and dust control.

(2) Airdrop, although less efficient than air landing, is a highly useful method of delivery. Where evacuation is not a factor, air delivery has significant advantages. It reduces aircraft vulnerability and the need for forward landing fields. Types of airdrop are low-velocity drop, high-velocity drop, freedrop, and low level extraction.

(a) Low-velocity drop employs one or more parachutes to retard the rate of descent. Normally, this method uses energy-absorbing material for delivery of heavy equipment, such as field pieces and vehicles, and for fragile items.

(b) High-velocity drop employs a small parachute or other device to orient the dropped load with minimum retardation of the rate of descent. Cushioning materials or other devices attached to the load absorb the shock of impact.

(c) Freedrop employs no retardation devices and provides minimum cushioning and padding materials. It is used for fortification material, communications wire, baled clothing, and other items that will not be damaged appreciably by impact.

(d) Low-level extraction is the method of air delivery by which equipment or supplies are extracted from the cargo compartment of an aircraft flying in close proximity to the ground. An extraction device extracts the load, retards its forward momentum, and tends to prevent tumbling. The low altitude reduces requirements for cushioning materials and improves accuracy of load delivery.

f. Air Force Organization and Responsibilities for Delivery. Discussions of Air Force organization and responsibilities for delivery are included in JCS Pub 3 and FM 100-27.

11-28. Army Aviation

a. Mission. Army aviation augments the capability of the Army to conduct prompt and sus-

tained land combat operations. Army aviation is integrated into combat, combat support, and combat service support units of the Army when the employment of Army aircraft will benefit Army operations. For details on Army transport aviation, see FM 55-1, FM 55-40, FM 100-27, and AR 59-106.

b. Functions. Functions performed by Army transport aviation in the combat support and combat service support roles include—

(1) Air movement of supplies, equipment, and replacement personnel and units when ground lines of communications are nonexistent or inadequate, when aircraft are operated on a recurring schedule between airfields, or when the concept of operations requires speed and mobility not obtainable by ground means.

(2) Evacuation of patients in augmentation of aeromedical evacuation performed by Army Medical Department air ambulance elements.

11-29. Emergency Supply by Air

a. Requests. Requests for emergency supply by air are a staff responsibility of the logistics officer. Submission of such requests is through channels by the fastest communications available, consistent with security. Division normally sub-

mits requests directly to field army, with an information copy to corps. Corps takes no action on the requests unless it recommends disapproval. The requesting unit recommends the type of aircraft and the method of delivery.

b. Delivery. Normally, any echelon of command that receives the request and has both the delivery means and the supplies available provides delivery. When it receives requests, field army decides whether to deliver the supplies (by FASCOM aircraft or by area airlift capacity allocated to field army) or to request the TASCOT to arrange air delivery. Parachute rigger personnel, who are located near the air terminal or supply depots, prepare supplies for delivery by parachute or free-drop. An airdrop supply company, normally assigned to the FASCOM, performs these operations. The unit to whose area an emergency flight is dispatched is responsible for selecting, preparing, and marking the landing area and for aiding in landing and unloading the aircraft. This unit also recommends approaches and exits and undertakes security measures at the landing area. Units receiving supplies delivered by free fall or parachute are responsible for recovery of supplies, parachutes, containers, and associated materials for retrograde movement.

Section VIII. TRANSPORTATION FOR STABILITY OPERATIONS

11-30. General

Stability operations require a reliable transportation system that is responsive to the requirements of tactics and logistics. The system must be capable of operating over varied and difficult terrain and of using various modes of transportation, including means not normally organic to units. The method of accomplishing movements and the modes of transportation to be used will depend on the situation. Hostile action, whether imminent or merely anticipated, will govern the planning and execution of transport operations. The availability of transport modes will govern the selection of equipment to accomplish the moves. Characteristically, there are numerous requirements for transportation support of such nonmilitary activities as civic action, refugee movement, and relief supply. Control of transportation should pass to the appropriate commander during operations and revert to the parent unit upon completion of the mission.

11-31. Problems

Special transportation problems in insurgent areas result from abnormal distances, difficult terrain, lack of signal communications, and the probability that movements will be subject to attack, harassment, and delay. When minimum essential items required to support unit operations cannot be carried by soldiers or by organic vehicles because of terrain conditions, other modes of transportation carry these items. The use of these modes of transportation should be planned far in advance along with adequate control measures.

11-32. Security

All modes of transportation are subject to ambush, attack, sabotage, capture, and destruction. It must be assumed that insurgent intelligence is adequate to advise insurgent forces on *what* is going *where*. Efforts must be made to keep knowledge of the *when* and the *who* limited to key personnel.

a. In transporting cargo during stability operations, a special consideration is the type of cargo to be transported. Certain items of great value to insurgents will require greater security. They may require the use of priority (air) transportation to lessen the possibility of capture or destruction.

b. Because of their speed, relative security from ground attack, lack of sensitivity to terrain conditions, and adaptability to small unit movement, aircraft frequently will be the most effective

means of supply or troop movement. Both Army aviation and aviation of other military services are used. Terrain, the tactical situation, and availability of airstrips will normally require resupply by airdrop as well as by air landing.

c. En route security must be provided for surface movements. Appropriate measures include intensive training of drivers; armoring and arming of vehicles involved; and use of armed escorts, military police, and attack helicopter escorts.



CHAPTER 12

LOGISTICS—PROCESSING AND SHIPPING RETROGRADE MATERIEL

Section I. GENERAL

12-1. Introduction

This chapter discusses the logistics aspects of processing and shipping retrograde materiel from a theater of operations. The concepts, doctrine, and procedures used in Vietnam have been field tested and are the basis for the doctrine on this subject.

12-2. Definitions

Definitions, as they pertain to logistics, are—

a. Retrograde Materiel Actions—Those actions that include the recovery, evacuation, processing, and shipment from a theater of operations of Department of Defense equipment and supplies

which are excess to the requirements of that theater.

b. Redeployment Materiel Actions—Those actions that include the processing of equipment and supplies belonging to redeploying units.

12-3. Sources

The redeployment of units results in the major portion of the retrograde tonnage. There are three principal sources of retrograde materiel.

- a.* Equipment in a redeploying unit's possession.
- b.* Depot GS, and DS stocks no longer needed due to reduced requirements.
- c.* Equipment accumulated through the normal evacuation of combat losses.

Section II. RETROGRADE MATERIEL TASK

12-4. General

The retrograde materiel task can be divided into three major functions: identification, processing, and shipment of retrograde materiel. Within each function, there are numerous subfunctions which must be completed.

12-5. Identification and Inspection

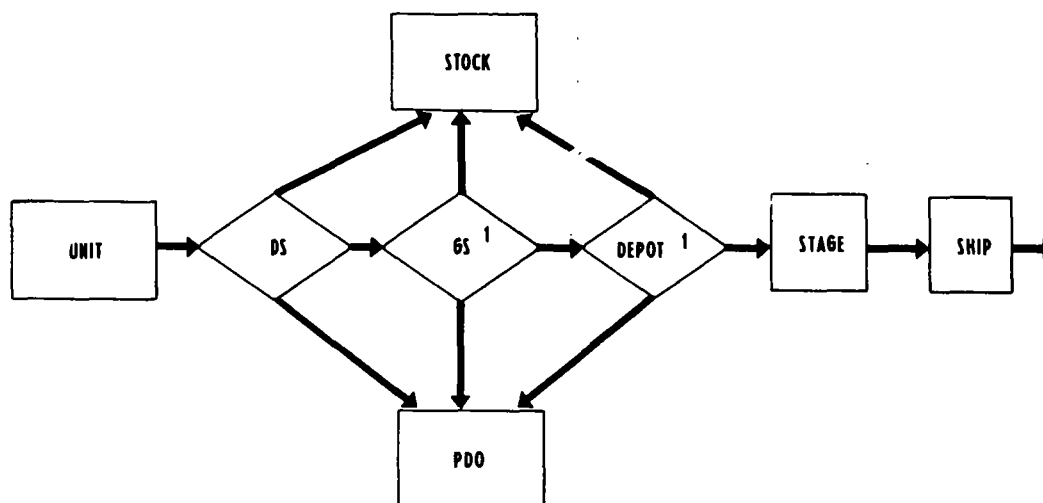
a. Identification. Identification of excess materiel can be done at any level. Retrograde materiel, however, must meet established standards measured by the following criteria:

(1) Needed in the Army inventory. Most retrograde items are standard military equipment needed to replace Army materiel in the supply system. During a retrograde operation, requirements for free world military assistance forces (FWMAF), and other US Government agencies must be reviewed and the excesses screened to fill these requirements. Normally, much of the commercial equipment will be disposed of through in-theater property disposal channels.

(2) Needed to support the rebuild program. Whenever a major end item is uneconomical to repair, the assemblies and components that can be used in support of CONUS and offshore rebuild programs should be stripped from the major end item and processed separately for retrograde action.

(3) Must not exceed maintenance expenditure limit (MEL). The maintenance expenditure limit—or MEL criterion—is applied to each major end item after technical inspection. The MEL varies by type of equipment, but is about 65 percent of the acquisition cost. To determine if it is economically feasible to process an item for retrograde action and rebuild it, the cost of transportation and cost of repair are added. The resultant sum must not exceed the MEL. In practice, this criterion would permit repairs to be made in the theater on many items for which the MEL would be exceeded with CONUS repair due to increased labor and shipping costs.

b. Inspections. A complete technical inspection (TI) should be performed when time permits.



1. GS OR DEPOT FACILITIES MAY BE BYPASSED WHEN RETROGRADE CRITERIA HAVE BEEN MET

Figure 12-1. Evacuation and retrograde flow of Army materiel.

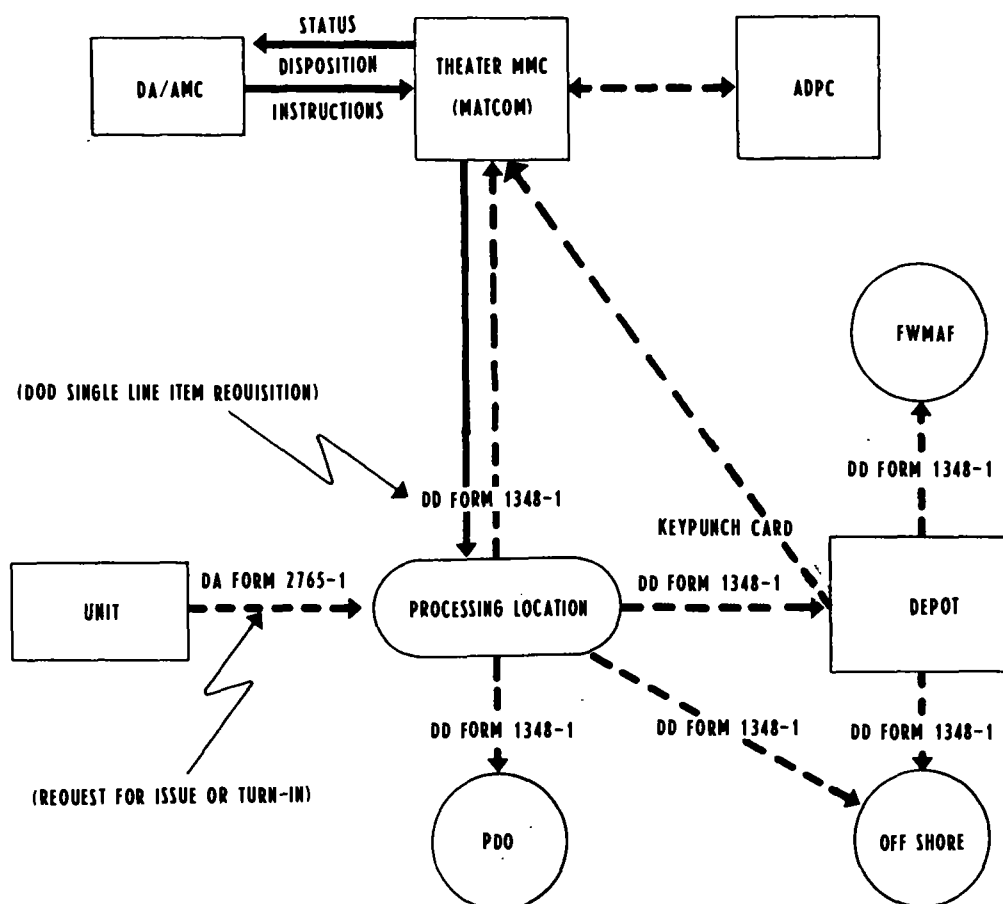


Figure 12-2. Retrograde document flow.

However, an abbreviated TI is required to handle large quantities of retrograde equipment rapidly. The Department of the Army and the US Army

Materiel Command establish the inspection procedures. The inspection procedures must provide for rapid inspection and classification of a large vol-

ume of materiel. Since the maintenance facility at the final destination must have the capability to repair the item, its final destination would be indicated by the category of maintenance required. Due to the poor appearance of most retrograde cargo, it is susceptible to rough handling throughout the pipeline. Quality assurance over handling, packing, packaging, and movement must be maintained to insure retention of the maintenance classification status. After the equipment is inspected and classification made, shipping damages may result in a total loss of the item at destination. Obviously, a monetary loss results when equipment becomes uneconomically reparable due to mishandling in transit after processing and shipment costs have been incurred.

12-6. Processing

a. General. During actual processing, retrograde equipment is accounted for, inspected, maintenance classified, cleaned, and packed for shipment. The retrograde process must be analyzed to insure that the processing capability equals or exceeds the tasks to be accomplished. An example of evacuation and retrograde flow is shown in figure 12-1.

b. Documentation. Units turn in equipment to

the processing location, utilizing DA Form 2765-1 (Request for Issue or Turn-In). The processing unit then ships the equipment, utilizing DD Form 1348-1 (DOD Single Line Item Release/Receipt Document), and a copy is sent to the MATCOM MMC. If disposition instructions are not available, the processing unit requests disposition instructions from the MATCOM MMC. Document flow is shown in figure 12-2.

12-7. Shipment

Timely disposition instructions for equipment are essential for the orderly flow of retrograde, since delays create backlogs at staging areas and repeated handling and sorting of equipment. Predisposition instructions (i.e., the destination is known in advance) facilitates the projection for and receipt of ships and aircraft for movement of the cargo. Control over the retrograde assets must be centralized with disposition instructions being furnished from DA and the theater involved. Containerized shipments should be used extensively for smaller multiple items. These containers—commercial or government-owned (or leased) shipping container (SEAVAN), military-owned demountable container (MILVAN), and roll-on-roll-off container—offer speed, security, and throughout capability from distant processing points to port.

Section III. SUPPORT REQUIREMENTS

12-8. Organization

a. Staff. The organization for redeployment operations is dependent on the theater force structure. If the theater is fully developed with a TASCUM, the MATCOM (which would have an adequate staff, an MMC, and control of a port) would conduct the operation. The MATCOM would also coordinate and manage the theater retrograde effort. However, this operation can be conducted by any unit that has the resources that are either organic or allocated by the theater army commander to perform this mission. The following items should be considered:

(1) For small-scale retrograde operations, the retrograde functions can be accomplished among the functional staff offices of the applicable headquarters, e.g., ACofS, materiel; ACofS, security, plans and operations; and ACofS, movements.

(2) For large-scale retrograde operations, a separate staff element may be necessary to handle

efficiently the magnitude of the tasks. This separate staff would provide centralized planning and staff supervision for the overall program.

(3) Under either method of operation, quality assurance must be maintained, and medical service expertise must be utilized to insure that quarantine requirements are met.

(4) The capability to retrograde equipment and supplies may be an overriding consideration in the theater's redeployment plan. Therefore, the logistics support portion of the redeployment plan may indicate that this support would be the restricting factor for the operation.

b. Units. It is necessary to determine the total processing workload by type and density of equipment in order to retain a proper mix of units to support retrograde and redeployment operations. Inventory reports from units, support units, and depots are essential in making this estimate, and reports must be accurate. Analysis of this total requirement provides the foundation for improv-

ing the capability to handle the retrograde materiel. Requirements should be matched against TOE capabilities and experience factors in order to determine the number and type of units required to accomplish the workload in a given period of time. These units are under the centralized control of the MATCOM or the theater organization performing the MATCOM function.

12-9. Facilities

a. Location. Location is a key factor which determines the processing unit's capability to conduct retrograde operations.

(1) The retrograde facilities should be located at or in close proximity to an ocean and an aerial port, and have access to the following:

- (a) Main supply route (MSR).
- (b) Depots
- (c) Fresh water supply.

(2) The MSR should provide overland access to the retrograde facility and be supplemented by the inland waterways and the aerial port. The depots receive the equipment designated to remain in the theaters. As fresh water is essential for the cleaning of equipment, a natural fresh water source such as a lake or stream must be available.

b. Structures. A retrograde processing facility must have numerous vehicle racks capable of handling all of the equipment being processed, including the heaviest piece of equipment. Shelter (buildings or tents) would have to be provided for administrative purposes, processing use, and housing for organic and transient personnel.

c. Physical Layout. The physical layout of a retrograde processing center is designed to accommodate two types of retrograde materiel—rolling stock and multiple items. Rolling stock includes everything with wheels or tracks, while multiple

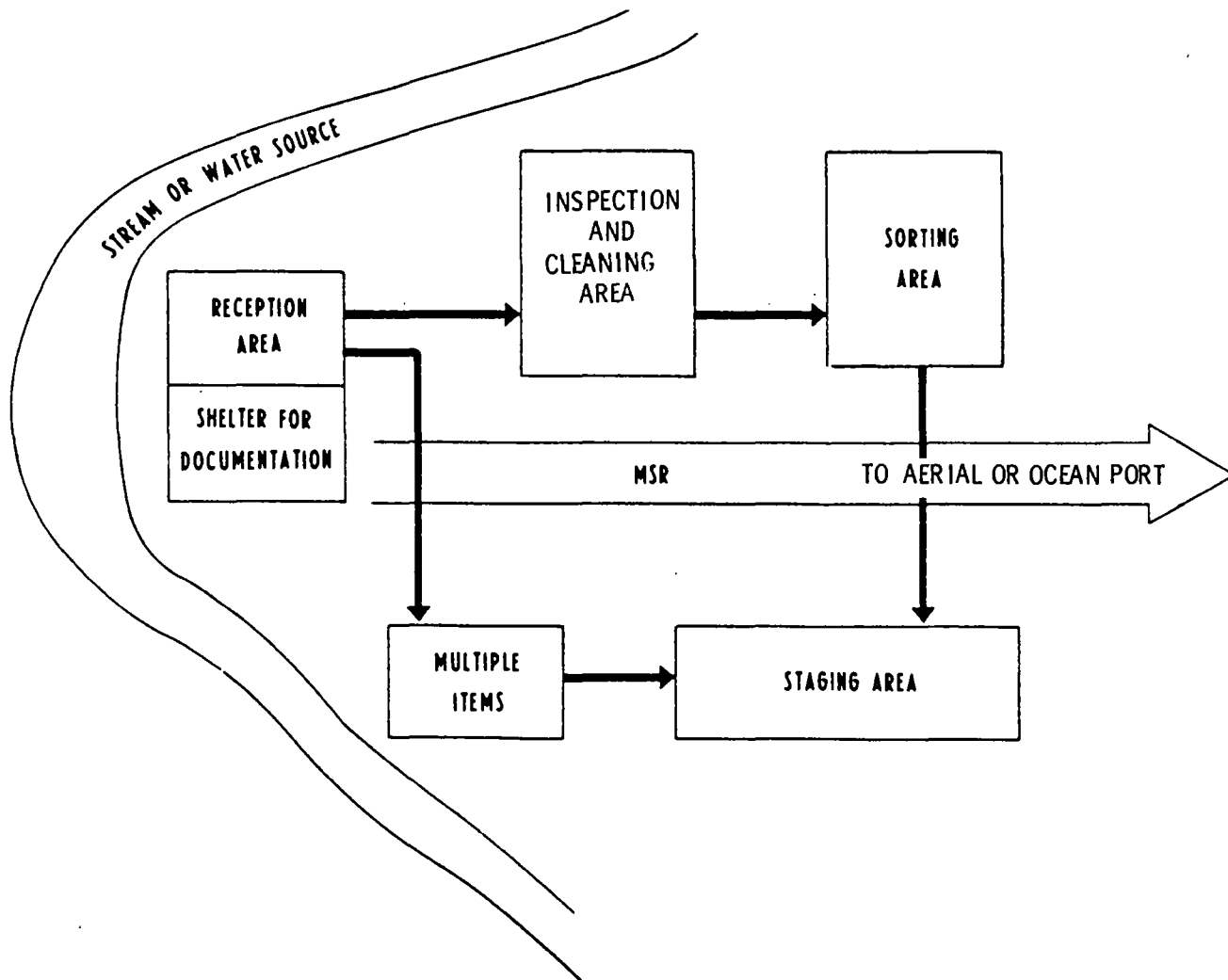


Figure 12-9. Sample retrograde processing layout.

items are weapons, communications equipment, and other items not classified as general supply. Aircraft and their components, as well as medical items, are processed at separate facilities. A sample retrograde layout is shown in fig. 12-3.

(1) *Rolling Stock*. The physical layout of a retrograde processing center for rolling stock should include reception, inspection and cleaning, sorting, and staging areas. The functions of each are described in (a) through (d) below.

(a) *Reception area*. In the reception area, preparation for redeployment or the turn-in of equipment is conducted. Accountability (documentation), precleaning, and redistribution are the major functions of this area.

(b) *Inspection and cleaning area*. At the inspection and cleaning area, equipment is cleaned, inspected, and lubricated. For optimum operations, servicing racks should be constructed in sufficient length (up to 100 feet long) to perform these three tasks simultaneously. In lieu of long racks, multiple racks in line would be an adequate substitute. The former method is preferable because of the difficulties encountered in movement and handling of unserviceable, heavy equipment. Unserviceable equipment, particularly tracked vehicles, requires a stable hardstand made of concrete around and under the service racks. This pad must be sloped under the wash area for proper drainage since a great quantity of water is used in cleaning.

(c) *Sorting area*. In the sorting area, equipment is sorted by classification and destina-

tion. The transportation control and movement documents (TCMD) are prepared and distributed to final destinations.

(d) *Staging area*. The staging area is primarily a holding area for equipment or materiel prepared for shipment. It may also be an overflow area for a similar area at the port. Hardstand areas must be utilized to maintain equipment cleanliness.

(2) *Multiple Items*. The multiple item processing area can be separated from the rolling stock area, but, to facilitate operations, it must be nearby. In all cases, however, the reception area and staging area should be common to both the rolling stock and multiple item areas. The multiple item area will have organic cleaning, inspecting, testing (for communications-electronics (C-E) and similar items), packing, documenting, and accounting capabilities.

12-10. Supporting Material

Supporting material includes packing, packaging, and preservation items, lashing material for ship's cargo, and water cleaning equipment. Stockage and replenishment of this material and equipment must be preplanned and controlled to meet the requirements of the retrograde program. The high-pressure, low-volume water cleaning machine, commonly called the "water blaster," is the primary equipment used to clean vehicles adequately to meet the US Department of Agriculture quarantine standards.

Section IV. RELATED ACTIONS

12-11. Ammunition Retrograde

A major item eligible for retrograde includes ammunition excess to in-country requirements. Unserviceable ammunition and ammunition components are included. Basic requirements and procedures for the retrograde of ammunition are as follows:

a. *Location*. Special consideration will be given to selection of locations for processing retrograde ammunition. The handling, inspection, processing and storage of munitions differ from other commodity classes and must be treated as a hazardous commodity. The selection of the location, quantities to be stored by class, and safety requirements are to be in conformance with the prescribed methods and procedures outlined in TM 9-1300-206 and FM 9-6.

b. *Structures*. To the degree possible, the structures used for processing and placing items in final state for shipment should be covered to afford protection to the items being processed. The structure should contain sufficient space to accommodate the operating crew, tools, equipment, and operating supplies.

c. *Physical Layout*. The physical layout of the processing center is to be designed to provide for receiving areas, inspection and segregation areas, processing area, and holding areas for processed ammunition awaiting final shipment. Ammunition will be the only commodity processed in this area. Other materials not compatible with ammunition will be processed at other locations. TM 9-1300-206 will be used for determining the appropriate quantity distances for the various classes

of ammunition that are to be stored and processed.

d. Procedures. The procedures for rapid deployment, redeployment, and retrograde are contained in TM 750-172 through TM 750-178 and TM 750-210. In addition, written standing operating procedures are to be developed for all operations involving ammunition. The format for development of SOP's is contained in FM 9-6.

12-12. Contingency Plans

Short notice for redeployment can be expected, due to last minute decisions and delayed announcement of the specific units or materiel to be deployed. Therefore, contingency plans for various redeployment situations must be made an inherent, continuing requirement in logistics planning.

12-13. Pipeline Cancellation

Once a unit is announced for redeployment, all orders to CONUS for equipment and supplies for that unit must be cancelled. During redeployment operations, theater resupply requirements will

fluctuate rapidly, due to changing demands for repair parts and replacement items, lower usage factors, and declining inventory requirements. Therefore, strict control of theater assets and requests for replenishment stocks is essential. The theater should rely upon supplies generated from redeploying units to fill the residual forces' needs.

12-14. Excess Equipment

Excess equipment should not be tolerated in a command, since it places an unscheduled burden on the logistics system at all times. However, when excess equipment is detected within a command, provision must be made to simplify the turn-in of excess so that the equipment is not disposed of in an unauthorized manner.

12-15. Recovery, Collection, Classification, and Disposition of Materiel

Additional information on the recovery, collection, classification, and disposition of materiel in the Army in the field is contained in AR 755-5, FM 29-23, and FM 29-24.

CHAPTER 13

LOGISTICS—OTHER SERVICES

Section I. CONSTRUCTION

13-1. General

a. Construction is the building or rehabilitation of facilities for military forces in theaters of operations. Construction includes the fabrication and rehabilitation of structures, utilities, roads, pipelines, railroads, bridges, airbases, air terminals, marine terminals, defensive works, and protective works.

b. Construction provides for the mobility of military units. The ability to concentrate construction means rapidly in order to overcome obstacles created either by nature or by enemy action permits faster movement on the battlefield, thus increasing mobility.

c. The nature of the conflict and the operational environment have a direct influence on military operations and are major factors in shaping theater construction policies. The concepts of increased mobility and dispersion of forces and installations in a nuclear war also directly influence the type and scale of construction work in the theater of operations. Some of the tactical and combat service support demands imposed on construction support are construction support of the US Air Force, camouflage of critical installations, and construction of the following:

- (1) Protective shelters for critical installations, personnel, and supplies.
- (2) Air defense installations for essential areas.
- (3) Theater-controlled dummy and decoy air defense positions.
- (4) Main supply routes.
- (5) Secondary and access roads serving dispersed installations and facilities.
- (6) Beach and air lines-of-communication facilities.

13-2. Construction Policies

a. In an active theater, only minimum essential construction work and development of installa-

tions and facilities is authorized. The use of permanent-type materials (e.g., brick, tile, stucco, and concrete) is authorized when—

(1) An agreement exists with the government of the host country to provide such construction, and then only after prior approval of the Department of the Army.

(2) Materials normally used in minimum essential construction are not available or will not be available in time to meet construction schedules, and permanent-type construction materials are available or can be available in time to meet construction schedules at no increase in total construction cost. (When permanent-type construction materials are used, the interior and exterior finishes of structures must be in keeping with minimum essential construction standards.)

b. Standard facilities for such installations as hospitals, depots, and shelters are designed for use in active theaters of operations. Standard facilities present the simplest method of using standard materials to construct acceptable installations, reduce the variety of construction materials required, simplify supply procedures, and reduce costs.

c. Construction priorities, compatible with instructions from higher echelons, are assigned at each command echelon. These priorities vary with the strategic or the tactical situation, the climatic and geographic environment, and the mission of the command.

d. Construction proceeds at maximum speed with a minimum of materials, equipment, and skilled labor.

e. Construction engineers make maximum use of the designs of installations and facilities contained in the technical manuals that pertain to the Army Facilities Component System (AFCS). These manuals provide necessary drawings, plans, and bills of materials for the majority of the common and repetitive construction tasks encountered in an active theater of operations. They are

appropriately coded for use with automatic data processing systems and advanced supply procedures. Use of these manuals assists in construction planning, programing, and review, as well as in procurement, distribution, and control of construction material (AR 415-16, TM 5-301, 5-302, 5-303).

f. New design, when necessary, is simple and adaptable to multipurpose use and future expansion.

g. Protective construction is defined and discussed in JCS Pub 3. Such construction is applicable only to those facilities where continuity of activity is of sufficient priority to warrant protection.

13-3. Responsibilities

a. The theater commander establishes plans and policies for construction, based on coordinated planning by construction representatives of theater army, navy, and air force.

b. The theater army commander discharges his construction responsibilities through an ENCOM. Depending on availability of engineer resources, the magnitude and diversity of the engineer tasks, and the theater army commander's consideration of span of control, the ENCOM may operate under direct control of the theater army commander or under a TASCUM. In accordance with base development plans and based on recommendations of the theater army engineer—who normally would be the ENCOM commander when the ENCOM is operating under the direct control of theater army—and other staff elements, the theater army commander establishes construction policies, standards, and priorities, and issues construction directives. The theater army commander is responsible for Army construction support throughout the theater, including that performed for other US military services and government agencies and for support of Allied forces as may be directed by commanders of appropriate joint, unified, or combined commands.

c. The ENCOM commander accomplishes this mission by supporting theater army subordinate commands with task groupings composed of appropriate engineer troop units and other arrangements for support such as contractual services.

This may include accomplishment of construction or combat support tasks within the tactical areas of responsibility of field commands in accordance with priorities established by the theater army commander. Under the foregoing conditions, requirements of the TASCUM will normally be fulfilled through allocation of ENCOM effort and resources to TASCUM activities on a mission, task, or area basis—or combinations thereof—with suitable arrangements for command control, such as direct support, general support, operational control or attachment, as may be appropriate.

d. The field army commander is responsible for construction in the field army area, except for those interzonal projects common to both the combat zone and the COMMZ, but he lacks the means for more than expedient-type construction. The field army commander can perform required construction with units of the engineer combat brigades assigned to corps and field army; however, this detracts from these units' primary combat support roles. Construction in the field army area is normally of a temporary nature. The normal method of employing construction units in the combat zone from the ENCOM is on a task or mission basis, as opposed to attachment or direct support (FM 5-162).

13-4. Construction Support in Stability Operations

Developing countries in which stability operations may be conducted frequently require much light construction. Demolition and sabotage operations by insurgent forces may aggravate the situation.

a. Construction support may include provision of combat bases, security posts and their defenses, and communications facilities; an adequate ground transportation system; extensive airstrips, airfields, and helicopter pads to support aviation of both the Army and other military services; essential construction of resettlement areas; and support of the local population in military civic action projects.

b. The scope of the construction effort requires maximum use of local labor and materials obtained through coordination with CMO staff and CA units. Additionally, combat units will have to participate to a greater degree than is normal in construction of facilities for their own use.

Section II. LABOR

13-5. General

a. *Scope.* The labor function of combat service support includes the use of personnel resources in

theaters of operations to further the military effort. It is concerned with the procurement, management, and use of labor available from—

(1) United States and Allied military service units.

(2) Prisoners of war and civilian internees.

(3) United States, Allied, neutral, and enemy civilians, including refugees, evacuees, and displaced persons. The basic policies on the subject are contained in JCS Pub 3.

(4) United States military prisoners.

b. Planning. To release as many military personnel as possible for combat duties, planning calls for maximum use of all sources of noncombatant personnel (*a*, above), consistent with operational and security requirements, essential civilian needs, and international laws and agreements to which the United States is a party. Planning for operations in any geographic area must include an estimate of available manpower and its capabilities in relation to requirements. Planning must also provide for the procurement, use, and administration of this manpower in support of the combat forces.

c. Enemy Actions. Enemy employment of mass casualty and mass destruction weapons in the theater will complicate the maintenance of a civilian work force in probable target areas, such as troop concentrations and critical combat service support installations (para 2-3f).

d. Geneva Conventions. The United States is a party to the Geneva Conventions of 1949 which contain provisions for the treatment of prisoners of war and the protection of civilians during hostilities. Pertinent provisions of these treaties are contained in FM 27-10, DA Pam 27-1, and DA Pam 690-80.

e. Information Program. Because the labor force may represent a sizable portion of the local population, control of the people may become difficult under certain conditions. Upon the formation of the labor force, the initiation of an information program may lessen the panic and disorganization resulting from catastrophic conditions.

13-6. Sources and Types of Labor

a. Civilian Employees. A general policy of the Department of Defense is that civilian personnel are used in all positions that do not require military skills or military incumbents for reasons of training, security, or discipline. Oversea areas make maximum use of the services of nationals of the country and other locally available civilians. United States civilians and third state nationals are imported into such areas only to the extent necessary to the security of the forces or when required skills are unobtainable from local

sources. Although mobile labor may be required for emergency support of certain critical activities, local civilian residents meet on-site requirements insofar as practicable. Paragraphs 14-10 and 14-11 discuss methods of employment and administration of civilian personnel, both US citizens and foreign nationals, in support of Army operations under various conditions. Two methods of employing foreign nationals are through—

(1) *Requisition demand.* In occupied enemy territory, when labor is procured by requisition demand on the local government, that government will be responsible for furnishing, administering, and paying such personnel, and the US Forces will observe the provisions of the Hague and Geneva conventions in their utilization. The terms and conditions of employment and the practices of the government agency in the administration of requisitioned personnel will not initially be interfered with except as they may be necessary to assure effective operations and avoid conditions or practices which would reflect discredit on the fairness and humaneness of the US Forces. As the occupation progresses, however, and conditions become more stable, it may become necessary to direct changes in administration to meet the needs of the occupation forces and US international relations objectives. At the cessation of hostilities, especially when a lengthy occupation is anticipated, a complete review should be made to assure that employment practices relating to local national personnel furnished the US Forces are effective and equitable to all concerned.

(2) *Direct hire.* In case it is not feasible to obtain local national civilian personnel by requisition in occupied enemy territory, the US Forces may hire such personnel directly and charge their wages and any other expenses to the enemy government as a cost of occupation. The Hague and Geneva conventions will be observed in their administration and employment (DA Pam 690-80).

b. Contractual Services. Engagement of a resident contractor to provide the service or product desired can reduce, in part, the need for direct hire and supervision of labor. Contractual agreements include logistic support, if any, provided the contractor for his personnel. In contract negotiations, care is necessary to insure that employment conditions are in accordance with applicable local laws and regulations, and that wage scales paid by the contractor are in agreement with those applicable to direct hire labor.

c. Type B Units. Type B units are TOE service organizations that integrate US military and

non-US personnel into a work force. Such units contain the necessary equipment and a qualified military cadre. To the extent permitted by international law and agreements, civilian personnel fill noncritical spaces in the organization. United States forces normally provide these civilians logistic support in accordance with theater or theater army directives.

d. Enemy Prisoners of War/Civilian Internees/Detainees. Chapter 20 contains the basic policies and procedures for the use and administration of prisoner of war labor. To obtain maximum use of prisoners, work assignments should be in accordance with their training and skills. Proper classification of specialists and provision of necessary equipment and administration will assist in the use of prisoner of war labor.

e. Labor Pools. Analysis of the labor needs of each installation determines the amount of permanent labor necessary and the amount that a general labor pool can furnish to meet fluctuating demands. Combat troops work as laborers only as a last resort.

13-7. Responsibilities

Paragraphs 14-3 through 14-6 and paragraphs 14-10 through 14-12; FM 101-5; and Department of the Army civilian personnel regulations (CPR) discuss staff responsibilities for manpower management and general labor activities. Chapter 6 and FM 41-10 define civil affairs responsibilities.

13-8. Labor Support in Stability Operations

The movement, maintenance, and storage of supplies may require a large labor force. The initial need for local skilled labor may be particularly severe in stability operations because of the requirement to establish a combat service support base and the need to build up storage sites, airfields, depots, and transportation facilities.

a. Availability of Local Labor. Usually, there is an adequate amount of unskilled labor in underdeveloped areas. There also is generally large-

scale unemployment or underemployment, and the economy of the area can afford the siphoning of a portion of its manpower.

b. Inhibiting Factors. Although large reserves of labor may exist in underdeveloped areas, certain factors may inhibit the availability of this labor.

(1) *Health and sanitation.* Existing health and sanitation conditions may reduce the size of the physically fit labor force and increase the number of persons needed to accomplish specific tasks.

(2) *Labor force mobility.* The labor force in these areas may not be mobile. Laborers may have close village and ancestral home ties that they will be reluctant to sever.

(3) *Location.* Most of the readily available labor is in and around the cities and towns.

(4) *Politico-military situation.* The availability of local labor will depend on such factors as the nearness of military operations to the cities; local reaction to the insurgent threat and fear of reprisals; attitude of the local population toward the government, the United States, and US forces; and the degree of authority exercised by the local government.

c. Use of Local Labor. Besides limitations on availability of local labor, there also may be limitations on use of the labor. The people may have a high aptitude for learning and, once taught, an ability to operate complex modern machinery and equipment; however, time available will make it impossible, in many cases, to undertake the necessary training. This is especially significant when there is a language problem. Logistic tasks in which local labor can be used effectively include unloading operations, transportation of supplies and equipment from unloading sites to supply points and dumps, transportation of pack loads over difficult terrain, construction tasks, crating and uncrating supplies, other general labor tasks at depots and supply points, and evacuation of patients by litter.

Section II. MISCELLANEOUS SERVICES

13-9. Available Services

Services available to counter the effects of enemy nuclear, biological, or chemical operations, and services provided Army troops and other forces in connection with enemy nuclear, biological, or chemical operations are in accordance with the following principles:

a. In the field army, decontamination platoons of the field service general support company, forward, and the field service general support company, army, perform decontamination of critical equipment and supplies and vital installations and areas beyond the capability of using units. In the COMMZ, decontamination teams attached to the

supply and service company, area support group, theater army area command (TAACOM), perform decontamination. Engineer and other units equipped with bulldozers and other types of earth-moving equipment also perform vital area decontamination. Large-scale decontamination, however, is expensive in terms of manpower and logistic effort; it is not normally undertaken unless the area affected is of critical importance or the installation involved cannot be moved. Mobile laundry units of field service general support companies, forward and army, provide a limited capability for decontamination of clothing.

b. Mobile laundry elements of field service general support companies, forward and army, perform impregnation and reimpregnation of clothing.

c. Engineer units construct permanent and semipermanent protective shelters and install collective protectors provided by supply units.

d. The general chemical laboratory provides CBR laboratory services for the theater. Identification of chemical agents and radiological isotopes and the laboratory analysis of CBR materiel in support of the theater intelligence mission are the primary areas of interest. Identification of enemy biological agents is a function of the medical laboratory. Within priorities established by the theater commander, the general chemical laboratory provides laboratory development of field expedient nuclear and chemical devices and measures in support of the theater operational mission. The laboratory also provides analysis of chemicals and other items procured or stored in the theater in support of the theater supply mission.

13-10. Real Property Maintenance Activities

The ENCOM is responsible for real property maintenance activities, which include minor new construction, operation and maintenance of facilities, firefighting and real estate services. The engineer command will provide facilities engineering general and direct support to all elements of the theater army authorized such support (includes elements located in the communications zone and combat zones). Support will normally be provided on an area/major installation/major unit basis by facilities engineering groups and districts. The number of facilities engineering districts and groups will be determined by the density and distribution of the elements authorized this support.

a. Real Estate. Procurement of real estate in a theater of operations is in accordance with the

laws of land warfare and with Department of Defense directives, as announced in policies by the theater commander. In Allied or friendly countries, international agreements or agreements between the theater commander and the country concerned may have provisions for procurement of real estate. Real estate acquisition and disposal is accomplished by elements of the facilities engineering districts and groups. Important factors to be considered in connection with real estate activities are:

(1) Requirements and allocations of areas and facilities must be planned well in advance.

(2) Commanders concerned are responsible for the selection of real estate sites under policies announced by higher headquarters. The engineer acts only as staff adviser, questioning agent, and office of record in carrying out command and theater policies.

(3) Coordination is effected initially through CMO staff and CA units.

b. Firefighting.

(1) Firefighting and fire prevention are the responsibility of all commanders. Engineer firefighting teams organic to facilities engineering units provide engineer firefighting service support to the Army as required. These units are available only at centers of military activity, such as large hospitals, depots, petroleum terminals, and tank farms. In other areas, troop units fight fires, supplemented by civilian firefighters, when available. Firefighting equipment is organic to units engaged in hazardous duties, such as ordnance ammunition units and Army aviation units. Avoiding fire loss and damage requires frequent inspection, careful planning of new construction, and fire prevention discipline. The commander of each installation prescribes fire drills for all units and standing operating procedures for a fire alert.

(2) In the development of passive air defense and area damage control plans and procedures, the engineer is responsible for submitting recommendations for firefighting and control of conflagrations, as well as submitting fire control training programs and the technical supervision of such training.

c. Maintenance and Utilities. Maintenance of facilities and the provision of utilities will be accomplished by elements organic to a facilities engineer group. Representative tasks to be performed by these units are: operation and maintenance of existing utilities (e.g., heating, air conditioning, electrical, water and sewage plants); maintenance of existing buildings, structures, and roads; limited modification of facilities; hire and

supervision of civilian labor; and the purchase of local materiel to support facilities engineering programs.

13-11. Quarters

Quarters is the provision and administration of shelter for a command, including its personnel, headquarters, establishments, and supplies. Administration of shelter is the responsibility of the commander having territorial jurisdiction in the area. Administration includes allotment of quarters areas and existing facilities to using commands, and the establishment of regulations governing the use of quarters areas. Shelter may take the form of bivouac, improvised cover, or shelter tents; camps, where troops are under heavy tentage, cantonment, where troops are in temporary structures; and billets, where private or public buildings are occupied. In hostile territory, billeting is as authorized by the theater commander. Governing factors in the type of shelter provided and the location of quarters include the mission of the unit, policies of the theater commander, availability of areas and shelter, dispersion, security, sanitation, training and other facilities, and comfort of the troops. For tactical considerations, see FM 100-5. Requisites for quarters areas include adequate routes of communications to and within the area; protection against the elements; adequate supply of water; good natural drainage; firm, dry soil; and freedom from sources of disease.

13-12. Camouflage

The basic principles of camouflage are followed in an offensive operation as well as in a static or defensive situation. The responsibility for camouflage rests on the commander, and all troops must be aware of the principles and techniques of camouflage. Technical advice and assistance is provided by the engineers. In a fast moving offensive situation it is doubtful if time will allow extensive artificial camouflage measures. However, engineers advise and assist other troops in the utilization of natural features which will aid in camouflage and concealment. During preparation for offensive operations, special attention is given to camouflage, concealment, and disguise of units and activities which may reveal friendly plans (FM 5-20). Camouflage is an important supporting element of tactical cover and deception (FM 31-40).

13-13. Crime Laboratory

Laboratory services in support of criminal investigation operations throughout the theater, including interservice responsibilities, are provided by a crime laboratory assigned directly to theater army. Under the control of the theater army provost marshal, the services provided by this unit include chemical analysis, firearms identification, and document and fingerprint examination.

Section IV. SERVICE ORGANIZATION

13-14. Cellular Team Units

A cellular team unit is a unit composed of separate teams (TOE cells), each of which includes personnel and equipment for the performance of a specific function. One or more teams may form a military unit to meet a special requirement not provided for in fixed TOE. Teams may augment units organized under fixed TOE when increments of less than company size are required.

13-15. Station Services

Station services are housekeeping and administrative activities required to maintain and operate the physical facilities of an installation and to provide supplies and services for assigned and attached personnel. Some or all of the installation services may be organized into composite units subordinate to the area support groups in the

TAACOM. The various types of services involved are under the staff supervision of the director of installations and the director of services of the area support group headquarters.

13-16. Pooling of Services

A pool combines the resources of several organizations under central control for common use. Pools may be formed for vehicles; materials handling equipment; labor; or special types of services, such as construction or maintenance. Pooling of personnel and equipment has the advantage of providing the means for more efficient distribution of the workload and flexibility in meeting peak demands. Disadvantages of pools are the lowering of morale and reduced administrative control because of the separation of troops and equipment from their parent organizations.

13-17. Vehicle Pools

When there is an urgent requirement for additional cargo transportation, some of the cargo vehicles of several units may be pooled to accomplish the task. Organizing such a pool necessarily reduces the capabilities of the unit from which vehicles are drawn. The principle of pooling vehicles is not limited to any branch or any type of transportation. All vehicles of any unit are a

source of transportation *except* Geneva Convention-protected vehicles; motor vehicles issued to move weapons; motor maintenance vehicles; and command, communication, and fire direction vehicles. Transportation truck units form the nucleus of vehicle pools. Truck companies may operate independently, be attached to such installations as depots, be placed under the control of battalion or group headquarters, or operate under the transportation officer.



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PART THREE
PERSONNEL
CHAPTER 14
PERSONNEL—GENERAL

Section I. INTRODUCTION

14-1. General

The personnel and manpower functions of combat service support encompass personnel requirements, authorizations, and strengths. These functions also encompass replacements, personnel services, and other personnel activities.

14-2. Staff Responsibilities and the Personnel Command

a. Staff responsibilities and activities pertaining to personnel are discussed in FM 101-5. Reference data on personnel activities are contained in FM 101-10-1.

b. Details on the organization and operation of the personnel command, theater army support command (TASCOM), are contained in FM 29-6.

Section II. MANPOWER MANAGEMENT

14-3. General

Manpower management involves the planning and programming of military and civilian manpower strengths in consonance with—

- a. Manpower requirements.
- b. Strength and budgetary limitations.
- c. Criteria for procurement and allocation of manpower.
- d. Criteria for use of manpower.

14-4. Objective

The objective of manpower management is to maintain both maximum combat effectiveness within available manpower resources and the optimum ratio among combat, combat support, and combat service support forces.

14-5. Principles

a. Manpower management seeks to insure accomplishment of assigned missions with a minimum of manpower.

b. Continual evaluation of missions insures the most efficient use of personnel resources.

c. Manpower management continually evaluates functions and assigns priorities for allocation of available manpower resources.

d. Bases for the determination of manpower requirements are missions, functions, standards of performance for mission and function accomplishment, and workloads.

e. Commanders have maximum flexibility in use of manpower resources.

14-6. Control and Troop Planning

a. Control of manpower management is through the mediums of manning documents, such as TOE, TDA, and manpower allocation vouchers, and officer manning levels.

b. Troop planning is discussed in chapter 4.

Section III. PERSONNEL MANAGEMENT

14-7. General

a. Personnel management is the process of planning, organizing, coordinating, directing, and controlling military and civilian personnel to obtain the maximum efficient use of manpower. Some of the personnel management activities are classification, assignment, promotion, separation, enlistment, and appointment.

b. The responsibilities of the personnel officer, relative to personnel management, are discussed in FM 101-5.

14-8. Classification

a. Personnel classification and position classification are means of systematically assigning personnel to positions for which they are qualified.

b. Personnel classification is the process of identifying, recording, and evaluating, on a continuing basis, the individual's mental and physical abilities, occupational qualifications, occupational record, interests, education, and military experience to enable assignment to positions best benefiting the Army.

c. Position classification is the process of identifying, codifying, and describing job content and qualification requirements of duty positions. The military occupational speciality (MOS) is the primary tool in position classification. The basis for MOS job content is job analysis. The MOS structure provides a standard description of Army jobs.

14-9. Assignment

a. Assignment is the procedure by which an individual is placed in an organization and given a specific military duty. Personnel classification and position classification are the normal bases for assignment. Needs of the service, however, are the primary consideration and the final determining factor in assignment of personnel.

b. Assignment is part of personnel management and is directly related to the following Army personnel management principles:

(1) Balance the best interests of the individual with the best interests of the Army.

(2) Increase the individual's ability to perform through training.

(3) Use the individual on essential tasks.

(4) Stimulate the individual's desire to perform.

(5) Assure the individual of professional development.

c. Assignment objectives are—

(1) Equitable distribution of personnel according to mental qualifications.

(2) Equitable distribution of physical capabilities.

(3) Equitable distribution of skills.

(4) Assignment according to interest and aptitude.

(5) Appropriate consideration of the organizational mission.

Section IV. CIVILIAN PERSONNEL

14-10. General

Authority for civilian personnel management is defined in AR 10-5. Delegation of this authority is through command channels to the lowest practicable operating level.

a. *United States Citizens.* Employment conditions of US civilians are in accordance with US statutes, Executive orders, and US Civil Service Commission regulations implemented by CPR.

b. *Non-United States Citizens in Foreign Areas.* Employment conditions of local civilians used by US forces in foreign areas must be in compliance with international law, treaties, and agreements; and with applicable US and local laws, to the extent that treaties and agreements do not provide otherwise. United States supervisory personnel

should be familiar with the customs, work habits, and language of local personnel. The provisions of an agreement with the host government normally govern the conditions of employment of non-US citizens in friendly countries. These employment conditions are in accordance with local law and practice to the extent compatible with the basic management needs of the forces. The Department of Defense prescribes broad policies, which are transmitted to the theater commander by the appropriate agency of the Department responsible for the combat service support of the theater headquarters.

14-11. Administration Under Peacetime Conditions

Under peacetime conditions, both in the United

States and in foreign areas, area or installation civilian personnel offices conduct administration of civilian personnel, both US citizens and non-US citizens. Civilian personnel officers supervise the civilian personnel program under general staff supervision of the assistant chief of staff, personnel (G1) (FM 101-5).

14-12. Administration Under Emergency Conditions

Army CPR M100 contains the basic policies and procedures for the utilization and administration of US citizens under emergency conditions. In DA Pam 690-80, guidelines are provided for the administration of non-US citizens during hostilities.

a. United States Citizens. In the United States, installation civilian personnel officers conduct civilian personnel administration. In overseas areas, personnel staff officers have this responsibility.

b. Non-United States Citizens in Foreign Areas.

(1) Responsibilities.

(a) Area commanders. The field army commander in the combat zone and the TASCOM commander in the communications zone (or other designated commanders exercising area responsibility) implement policies of the theater, theater army, or task force commander concerning the procurement and administration of local civilian personnel.

(b) Commanders of using units. Commanders of all units authorized to use local civilian personnel appoint appropriate officers to administer these personnel. In the absence of other arrangements for making payments, these officers are class A agents for handling civilian payrolls.

(c) Funds. Finance disbursing officers furnish class A agent officers the necessary local funds.

(2) Methods of employment. The commander having general area responsibility determines the method of employment of non-US local civilian personnel. He bases his determination on—

(a) Needs of the forces and circumstances in the area.

(b) Existing agreements, including civil affairs.

(c) United States foreign policy considerations.

(d) Capabilities of the local government.

(e) Appropriateness of local employment practices.

(3) Utilization of employees. Non-US civilian personnel may be direct-hire employees of the US Government, or personnel employed by—

(a) A friendly government and furnished to the US forces on a reimbursable basis.

(b) Local government agencies in an occupied enemy or former enemy area and requisitioned from these agencies.

(c) Contractors furnishing goods or services to US forces under contractual agreement.

(4) Administration and conditions of employment.

(a) Each unit using civilian labor may administer the personnel through an officer designated by the unit commander. Temporarily employed personnel should receive a standard hourly pay rate regardless of type of work performed or skill required. Personnel in supervisory positions should receive an additional pay increment.

(b) When conditions permit, administration of civilian personnel may be transferred to civilian personnel officers deployed under an area headquarters operating in conjunction with civil affairs units in the area. The area headquarters will maintain or reestablish standardized hours of work, tours of duty, allowances, differentials, premium pay for overtime, and other essential program elements.

(c) Where conditions require the use of civilian labor able to move from place to place as needed, such personnel may be formed into organized units and administered under regulations approved by the theater, theater army, or task force commander. Mobile labor units and personnel thereof are regulated by the Geneva Conventions in areas where the Conventions apply. Particular reference should be made to provisions concerning types of work and organization, such as Article 51 of the Geneva Civilian Convention which is intended to maintain the type of work performed as essentially civilian (FM 27-10).

(d) The conditions of employment for non-US civilians brought into the area across international boundaries for employment by US forces must be in accordance with international law and prior agreements with the friendly governments concerned. All non-US nationals residing in the area, as well as refugees and stateless persons, work under the same conditions as local nationals, unless applicable legislation or international agreements provide otherwise.

(e) Payment to direct hire civilian labor may be by one of two methods, depending on the

form of agreements between the United States and the host government.

1. *Direct payment.* Using units appoint a class A agent officer to pay each individual worker on the basis of payrolls prepared by the using unit and in accordance with applicable wage rates prescribed for the area of employment.

2. *Indirect payment.* Using units prepare and furnish to the appropriate civil affairs unit, through the area labor office, a certified payroll showing the individuals employed, the hours worked, and the job classification of the individual. The host country, or a subordinate government agency of the host country, pays the individual. Reimbursement, if required by agreements, will be, preferably, at the government level.

(5) *Logistic support.* Local civilian personnel who live in their own homes and report daily to an established worksite (static labor), as well as mobile labor, receive the necessary logistic support for their protection and for accomplishment of the labor mission (DA Pam 690-80).

(a) Static labor receives emergency medical treatment and, when authorized by the com-

mander exercising area responsibility, may receive one meal ($\frac{1}{3}$ ration) per day. Rations for civilian labor are captured enemy stocks, if available, locally procured supplies, or modified US Army rations, in that order of priority.

(b) The commander exercising area responsibility may authorize additional support (i.e., protective masks and class X clothing) for both static and mobile labor.

(c) The headquarters exercising area responsibility may prescribe the extent to which the cost of logistic support will be deducted from the pay of workers or furnished without charge, consistent with operating needs, prevailing labor practices, and civil affairs considerations in the area. Before issuance of such instructions, cost of individual rations normally is deducted from the pay of workers in an amount for each meal (one-third ration) not exceeding the normal cost of a comparable meal in the civilian economy.

(6) *Security screening.* Units using local non-US civilian personnel normally coordinate with local Army intelligence units for the screening of these personnel.

Section V. SAFETY MANAGEMENT

14-13. Objective

The objective of safety management is to conserve personnel and hardware from accidental loss so that maximum resources contribute to mission accomplishment. The integration of safe practices and standards into all activities is a continuing process.

14-14. Command Responsibility

The responsibility for effectiveness of safety management rests with the commander at each level. While safety requirements may require modification, safe practices and principles applied in training will lessen the probability of unnecessary losses of materiel and manpower during combat operations. Commanders must insure that directives, standing operating procedures, and training doctrine specify safe practices and safe physical standards, and that such practices and standards are observed.

14-15. Staff Responsibility

The personnel officer has primary general staff responsibility for supervision of Army safety activities. He coordinates safety management

matters with other general and special staff officers as follows:

a. Operations officer on integration of safe practices into training and operational activities.

b. Logistics officer on safety matters related to combat service support activities.

c. Provost marshal on traffic controls for safety.

d. Chaplain on moral responsibilities for safety.

e. Surgeon on occupational health, ionizing radiation, and accident trends in units and individuals.

f. Engineer on construction safety, fire prevention, and protection.

14-16. Integration

Effective integration of safety management throughout the command requires incorporation and enforcement of safety standards and procedures in operations. It also requires—

a. Corrective action to eliminate or control hazards, conditions, or practices that cause accidents.

b. Guidance at all echelons on matters pertaining to safety management.

c. Effective safety education.

d. Appropriate safety training of military and civilian personnel.

e. Adequate accident investigation and reporting.

f. Evaluation and effective use of accident data.

g. Command and staff supervision of the safety program.



CHAPTER 15

PERSONNEL SERVICES

15-1. General

Personnel services are combat service support activities pertaining to personnel as individuals. The immediate objective of personnel services is to assist the commander in attaining and maintaining good morale in a command. Personnel services include those functions that are primarily the staff responsibility of the ACofS, personnel (G1).

15-2. Special Services

The objective of special services is to increase the effectiveness of the Army through a planned off-duty program of sports, recreation, and library activities. The primary purpose of special services is to contribute to the mental and physical well-being of the individual. In CONUS, public facilities augment the activities of special services. In oversea areas, expansion of special services activities compensates for the lack of public facilities. Special services activities are a function of the personnel command, TASCOT, and of support brigades, FASCOM. Detailed information on special services operations is provided in FM 12-2.

15-3. Rests and Leaves

a. The authority for granting rests and leaves is contained in AR 630-5 and theater army policies.

b. Passes are periods of free time, limited to 3 days, that are not chargeable against accrued leave. Temporary duty (TDY) for rest and recuperation (R&R) is directed duty designed to rehabilitate the individual mentally and physically.

c. Quotas for leave, pass, and TDY for R&R may vary among theaters and even among units. The purpose of a quota system is to insure priority to troops having the greatest need for R&R. Quotas in the theater depend on capacity of leave and recreation centers and areas (FM 12-2), transportation, travel time, and duration of stay authorized at different facilities.

d. Rest areas and rest camps are normally for use by unit size groups from squad up to and including battalion. Leave and recreation centers and leave areas are for use by individuals. Units using rest areas provide their personal bedding, tents, and rations; and furnish supervisory personnel for control purposes.

15-4. Rest Areas

a. When combat operations permit, divisions and separate combat brigades establish some type of rest area in their operational areas. Separate or divisional brigades may establish a "water-hole" type of rest or recreational camp near the bath and clothing exchange elements. A special services team of the corps support brigade operates the rest area. Equipment and supplies for self-help sports, games, and projects are available in minimal quantities. The division rest area provides facilities for no more than 750 personnel at any one time, while the separate brigade rest area provides facilities for not more than 250.

b. Special services teams, operating under the control of the support brigade personnel and administration battalion commander, establish rest areas in the field army and corps areas. Each support brigade area provides a maximum of eight such rest areas, which operate near the bath and clothing exchange elements. Medical, dental, finance, mess, postal, chaplain, engineer, exchange, bath, legal services and clothing exchange activities provide additional support to rest areas in the combat zone, usually through the use of teams.

c. Special services teams, operating under the control of the area support group commander, establish rest areas in the COMMZ. The theater army area command, TASCOT, provides supply, maintenance, legal, military police, finance, chaplain, and exchange services to these rest areas and the MEDCOM provides medical support.

15-5. Leave and Recreation Centers

Cellular teams of the special services organization, personnel command, establish and operate leave and recreation centers in the COMMZ. Each center services from 200 to 800 troops. A special services detachment of the special services organization provides command, control, and supervision of each center's activities. The area support group commander of the area in which a center is established provides support services for the center. There may be a maximum of 12 centers established for a one-field army theater or a 12-division force. Medical centers also have leave and recreation centers. All leave and recreation centers provide bedding, billets, and food service. For lay personnel who desire chaplain activities, a retreat center is available in the overall center complex.

15-6. Rotation

a. The purpose of rotation is to conserve manpower, increase efficiency, and improve the morale of the theater forces. Exchanging new replacements for veteran soldiers prior to the time that the latter become physically or mentally exhausted achieves the purpose of rotation.

b. The rotation plan consists of rotation within a theater or rotation between theaters and the CONUS. The length of a normal oversea tour is subject to review when hostilities commence. When the length of an oversea tour is prescribed or is subject to a point system, the infusion of individual replacements into units in the theater of operations can preserve unit integrity. This process precludes mass exodus of personnel from the units by staggering individual rotation dates.

c. Theater commanders determine the criteria for intratheater rotation eligibility. Individuals with the greatest combat exposure receive priority. Emphasis is on retraining, reassigning, and transferring personnel between forward and rear areas. When rotation between oversea theaters and the CONUS is authorized, theater commanders establish the standards for implementation, based on availability of replacements. In the absence of a theater army intratheater rotation program, the field army may implement its own program.

15-7. Decorations and Awards

a. *References.* Details on the purpose, authority, and standards relative to decorations and

awards are contained in AR 310-10 and AR 672-5-1.

b. *General.* The awarding of decorations recognizes extraordinary, unusual, or outstanding acts of heroism and meritorious achievement or service. Decorations are visible and tangible public evidence of such acts or services and are cherished accordingly by the individuals who receive them. When promptly and judiciously awarded, with appropriate ceremony, they become incentives to greater effort and are instrumental in building and maintaining morale.

c. *Award of Decorations.*

(1) Because of the increased number of awards authorized during wartime, authority to award decorations is delegated to commanders in the field. This insures prompt recognition of heroism, meritorious achievement, and meritorious service. A complete understanding of the established standards for each decoration and close conformance to these standards are imperative. Deviation from established standards gives rise to complaints of inequity and tends to lower the overall value of decorations.

(2) Theater army commanders establish and maintain a uniform decorations and awards policy. This policy provides for judicious interpretation of requirements, appropriate delegation of authority, efficient processing, decorous presentation, and adequate publicity. Implementation of the policy is through the use of awards boards, precombat instruction, frequent comparisons of accomplishments, observation, and administrative reports.

(3) Commanders of units, to include divisions or lower units, establish awards policies to insure effectiveness of the awards system. To obtain uniformity throughout the theater, subordinate commanders base their policies on those of the next higher echelon. Normally, each commander retains authority to make certain specific awards.

(4) Recommendations for individual awards go through command channels. Each commander through whom the recommendation passes indicates his approval or disapproval. In event of disapproval, he cites specific reasons and includes a comment with regard to consideration for lesser awards appropriate to the act. Except when specifically authorized by Army regulations, recommendations do not return to the originator until they have been acted on by the commander having authority to make the award. Return of recommendations to the originator for administrative reasons is avoided.

(5) Commanders having authority to award decorations may appoint boards of officers to consider recommendations for awards and make appropriate recommendations. The board should consist primarily of unit commanders, but staff representatives with intimate knowledge of the policy and standards pertaining to decorations also should be on the board.

d. Civilian Awards. Civilians may receive recognition for meritorious achievements and services to the Army by award of decorations. The general standards required to merit such awards are comparable to those required of military personnel.

e. Foreign Awards to United States Personnel. Under constitutional restrictions, no person holding any office of profit or trust under the United States shall, without the consent of the Congress, accept any decorations, awards, and gifts tendered by any official of a foreign government. Under US laws a person may receive a gift or decoration tendered by a foreign government, subject to approval of Department of the Army and with the concurrence of the Secretary of State (AR 672-5-1).

f. Awards to Foreign Personnel. As a means of fostering good will and cooperation, meritorious achievements and services by military and civilian personnel of friendly nations who have materially assisted the United States in the prosecution of war against the enemy may be recognized by the award of decorations. While less proof may be required, the standards prescribed by Army regulations apply equally to personnel of foreign nations and to U.S. military personnel.

15-8. Postal Service

a. Each service administers its own military postal service to support its particular requirements under the terms of the postal agreement between the Department of Defense and the United States Postal Service.

b. The US Army Postal Service Agency, on behalf of The Adjutant General, is responsible for supervising and coordinating all activities and field operations of the Army Postal Service. Execution of policy and procedures for postal service within the Army is a command responsibility at all levels.

c. For details on Army postal operations in theaters of operations, see FM 12-2 and FM 29-6.

15-9. Personnel Affairs

Proper arrangement of an individual's personnel

affairs contributes materially to his military effectiveness. Information pertaining to personal affairs is contained in DA Pam 608-2. The survivor's assistance officer furnishes DA Pam 608-4 to the next of kin as provided for in AR 600-10.

15-10. Nonappropriated Fund Activities

a. Nonappropriated Fund activities are funds, associations, clubs, messes, or similar organizations operated and maintained from nonappropriated funds. There are three major categories of nonappropriated fund activities. Each has distinctive characteristics as to source of income, nature of operation, and mission for which established.

(1) Revenue-producing activities are financially self-sustaining operations established to sell goods and services to military personnel and certain civilian personnel, and to provide financial support for welfare funds. Exchange services and motion-picture theaters are examples of revenue-producing fund activities.

(2) Welfare fund activities consist of nonappropriated funds established to supplement appropriated funds in providing a well-rounded morale, welfare, and recreation program. Income is primarily from revenue-producing activities. Expenditures may be for recreational-type articles and services in support of programs designed to benefit authorized participants without charge, or with nominal charge when available resources are inadequate. Examples of welfare funds are major command welfare funds, central post funds, and unit funds.

(3) Sundry fund activities are financially self-sustaining operations established to provide certain essential services to specific categories of personnel. Individual benefits, on a membership basis, are from participation in, or patronage of, the programs available. Examples of sundry fund activities are officer and noncommissioned officer open messes and chaplain funds.

b. Nonappropriated fund activities are government instrumentalities and, as such, are entitled to all attendant immunities and privileges. Officers or civilian employees of the U.S. Government, acting within the scope of their official capacity, establish and supervise these activities as a command function.

c. The services provided by nonappropriated fund activities have an important bearing on morale and welfare. Operation of these activities is under the general staff guidance and supervision of the G1.

15-11. Army and Air Force Exchange Service

The mission of the Army and Air Force Exchange Service is to supply military personnel and other authorized persons with articles of necessity and convenience not provided by government issue and to gain profits for distribution to welfare activities not provided for by appropriated funds. In a theater actively engaged in combat operations, the articles for resale usually consist of toilet articles, candy, tobacco products, soft drinks, beer, souvenirs, and other items that add to the comfort of the individual. In the CONUS, in an occupied zone, and in other oversea areas, the list of items provided for resale is more extensive and varied. The mission is accomplished through establishment of permanent exchanges and exchange branches. Under field conditions—particularly in combat zones—when exchange operations are impractical, the theater army commander authorizes certain essential items for issue as part of the field ration.

15-12. Chaplain

a. The chaplain is the adviser to the commander in all matters of religion and morals, and morale as affected by religion within the command. He is available as a consultant on matters of the religions and cultures indigenous to the assigned areas of operations in relation to their effect upon the mission of the unit. He exercises for the commander responsibility for—

- (1) Religious services and ministrations.
- (2) Religious education of military personnel, their dependents, and authorized civilians.
- (3) Pastoral care and counseling.
- (4) Human self development.
- (5) Liaison with religious leaders in the civilian community.
- (6) Religious administration.

b. The chaplain is a representative of his denomination in the Army. As such, he is responsible to his denomination for compliance with ecclesiastical requirements.

c. The military duties of the chaplain, as prescribed by Federal law, are analogous to those performed by clergymen in civilian life, modified by distinctive conditions attached to military life. Each chaplain, as far as practicable, serves the religious and moral needs of the personnel of the command to which he is assigned. Within the limits of laws, regulations, and orders, he enlists the active aid and cooperation of military and civilian personnel, both lay and clerical, as the needs of the command may require or as the commander

may direct. He has training responsibilities in connection with the human self development program (AR 600-30).

d. A chaplain is not assigned duties other than those required by law, or pertaining to his profession as a clergyman, except in an extreme military emergency. When such an emergency makes it necessary for a chaplain to perform secular duties, he cannot be assigned any duty incompatible with his status as a noncombatant under the terms of the Geneva Conventions. He does not, and will not be required to, bear arms. He is not available for detail as exchange, athletic, recreation, graves registration, welfare, morale, information, education, personal affairs, or special services officer. He is not used for duty as trial counsel of courts-martial or as investigating officer, defense counsel, law officer, or member of the court.

e. Details on the responsibilities and functions of the chaplain are contained in FM 16-5.

15-13. Welfare Service

The American Red Cross, in accordance with its Federal charter, provides service for members of the Armed Forces in theaters of operations. The Army Emergency Relief extends financial aid to personnel of the US Army and their dependents. The Army Relief Society is a separate organization founded specifically to assist needy widows and orphans of Regular Army personnel. These agencies, combined with organic means, provide welfare services in the theater.

15-14. Legal Assistance

The staff judge advocate, as part of the preventive law program, provides legal assistance to eligible personnel in theaters of operations. This service includes advice, drafting of documents, and referral of legal matters—in appropriate cases—to civilian counsel of the individual's choice. The usual attorney-client relationship exists, and the information and files of individual cases are confidential and privileged.

15-15. Army Claims Program

The Army claims program enables the commander to protect the interests of the United States. As part of the preventive law program, it has a profound impact on the morale of military personnel in a theater of operations. The prompt adjudication and payment by the Army of valid claims for losses sustained by military personnel

incident to their service and of claims arising from the acts of military personnel are important in maintaining a high standard of morale. By prompt and adequate payment of just claims, the claims program provides additional assurance to the commander that he will have favorable public relations in his area of command, and favorable relationships with the host government.

15-16. Finance Service

Acting under the staff supervision of the ACofS,

comptroller (or the G1, when no comptroller is authorized), Finance Corps elements are responsible for planning the finance support of the command, to include procurement and deployment of finance units. When forces are deployed overseas, the ACofS, comptroller, promptly initiates the development and distribution of plans to the command for emergency currency controls that may become necessary in the future. A detailed description of the finance service mission, organization, and functions is contained in FM 14-3.



CHAPTER 16

PERSONNEL REPLACEMENTS

16-1. General

a. Personnel replacement functions include procurement, reception, classification, distribution, training, and assignment of individual and unit replacements to and within theaters of operations.

b. Training of individual and unit replacements is accomplished, based on the known and projected requirements for the Army in the field. Any retraining that may be required in the theater results from command evaluation of the individuals or units concerned and takes the form of normal command training or on-the-job training.

c. There are two types of personnel replacements, as follows:

(1) *Individual replacement*—an individual assigned or destined for assignment to fill a vacancy in an organization.

(2) *Unit replacement*—TOE unit assigned or destined for assignment to fill a vacancy in an organization. Unit replacements may range from cells (TOE 500-series) up to and including battalion and group size.

d. In FM 12-2, the automated system for assignment of replacements is described in detail; and the mission, organization, and functions of replacement operating units are discussed.

e. Figures 16-1 and 16-2 illustrate schematically the flow of individual and unit replacements between the CONUS and a theater of operations, and within the theater of operations.

16-2. System Relationships

The theater army automated system for assignment of replacements ties in with the CONUS system through the vertical personnel and administrative system that extends from the unit in theater army through the Department of the Army. The theater army replacement system reports requirements by status and strength, based on individual status changes received from auto-

matic data processing elements of supported activities in theater army. Requirements for unit replacements also include the composition of the unit being replaced. This replacement system must coordinate with the systems of the transportation command and the materiel command to insure timely and adequate intratheater transportation of replacements and issue of appropriate clothing and equipment to replacements as required.

16-3. Operational Concepts

a. The personnel and administration center (PAC) of the personnel command (PERSCOM) maintains the field administrative personnel record file on all theater army personnel. Using automatic data processing techniques, the PAC requisitions, assigns, and operationally controls individual and unit replacements, including personnel in the theater being returned to duty status. The replacement element of the PAC performs centralized reclassification and reassignment actions for the PERSCOM.

b. Replacement regulating detachments assigned to the PERSCOM and FASCOM support brigades receive replacements from the CONUS and from within theater army, provide them mess and billets, and stage unit replacements.

c. The replacement element of the PAC notifies replacement-regulating detachments when to expect arrival of incoming shipments of replacements and keeps commanders informed of replacement allocations made to their units. The regulating detachments, in turn, report daily to the PAC concerning replacements received, those in transit, those awaiting onward transportation, and nonarrivals.

d. The theater army replacement level is reduced to a minimum, based on immediate requirements. However, levels may be increased by a short range lead to sustain planned major tactical operations when the transportation capability

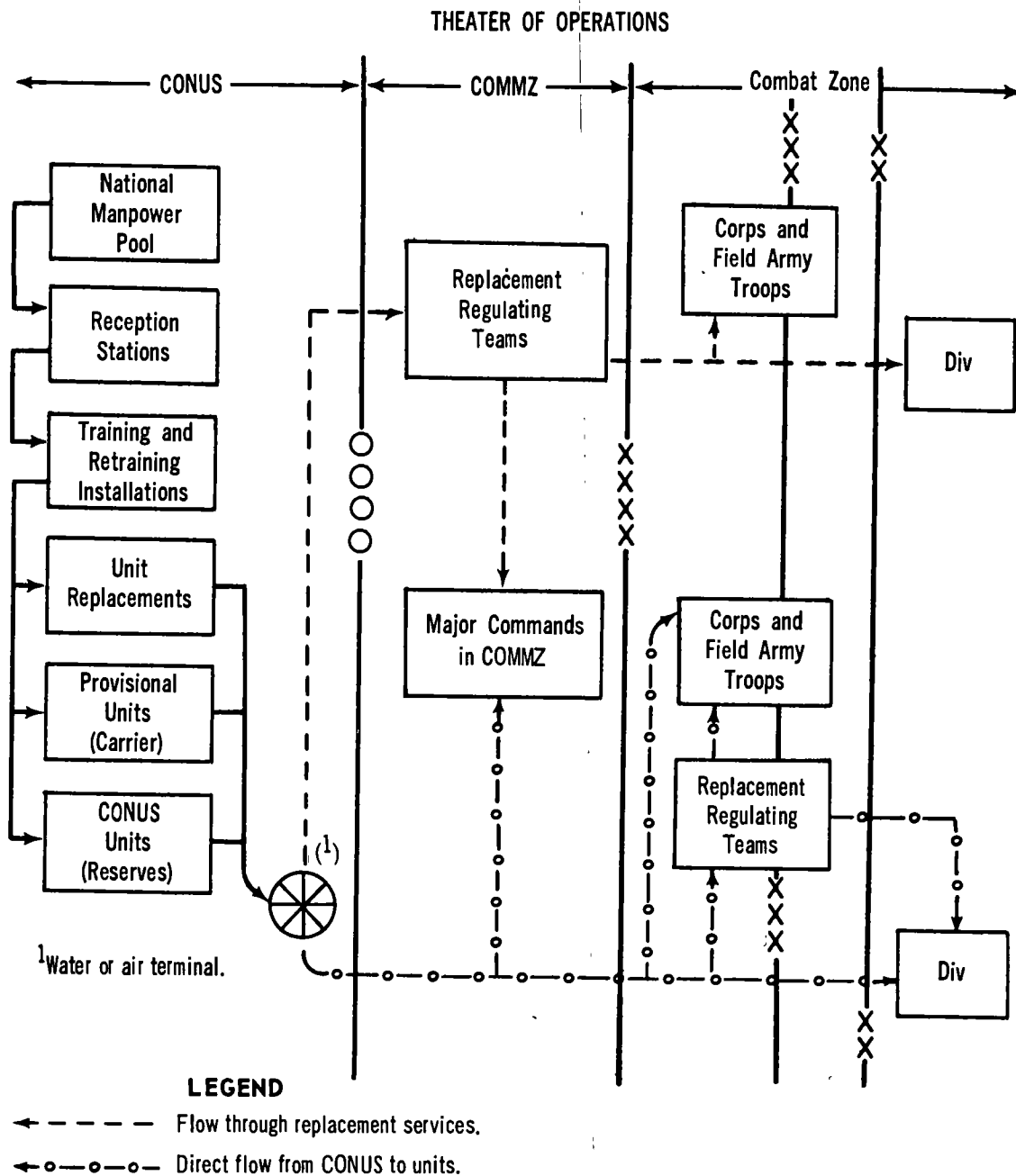


Figure 16-1. General flow of individual, packet, and unit replacements (schematic).

cannot support the planned replacement movement required.

e. Staging areas provide accommodations for troop units and transient personnel between movements over the lines of communication. Staging areas are usually within easy marching distance of terminals, transfer points, airfields, or highways over which troop movements are planned. The location selected for a staging area should afford protection against attack by mass-destruction weapons. Facilities may vary from

simple bivouac areas to establishments with covered shelter, mess, supply, and medical services. Staging areas must accommodate both personnel and their equipment. Often, they must also make provision for reuniting troops with their equipment, when it has been shipped previously, or for issuing equipment that is provided separately. Movement through staging areas must be expedited. The PERSCOM establishes the staging areas operated for both individual and unit replacements.

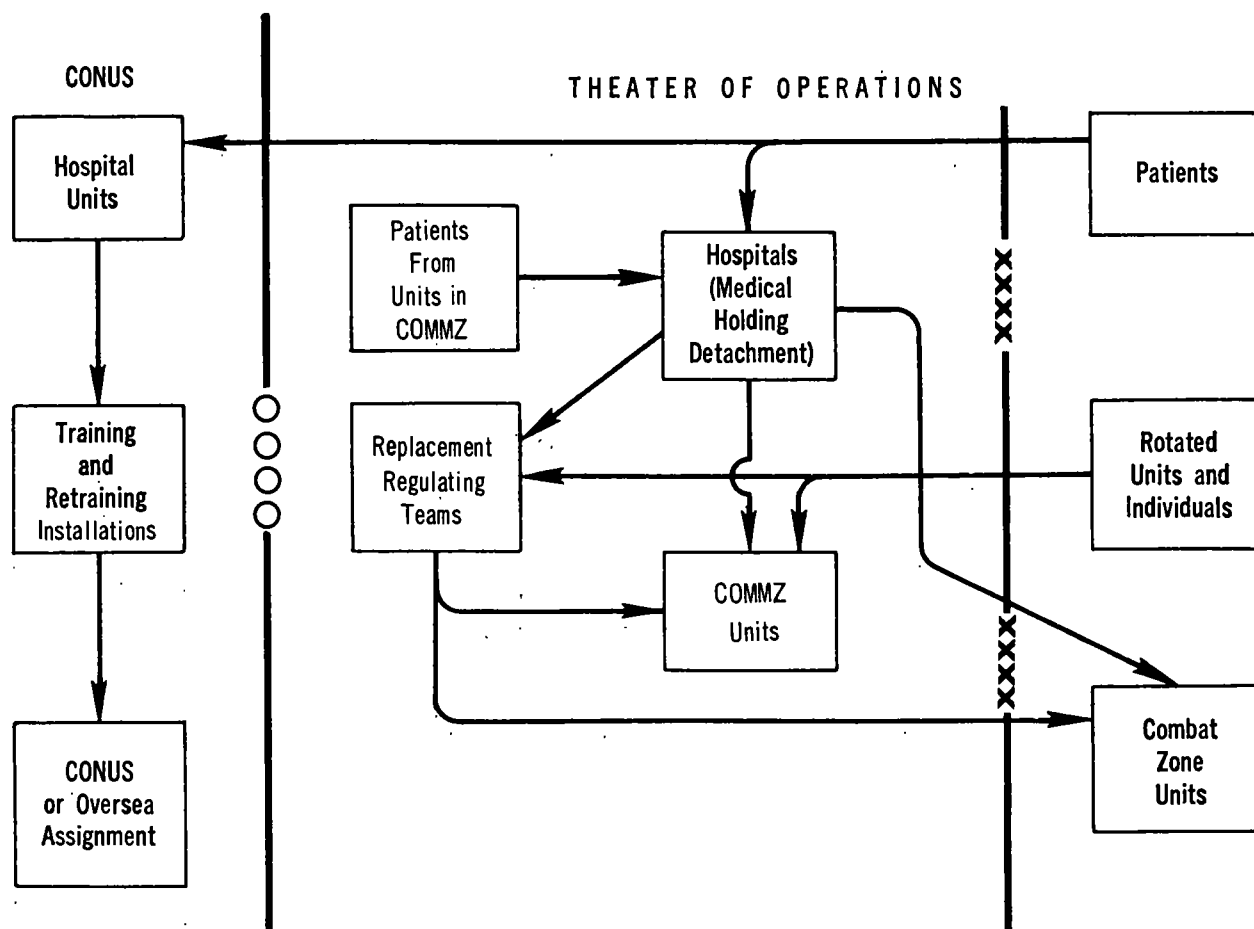


Figure 16-2. General flow of hospital returnees and rotated units and individuals (schematic).

16-4. Requisitioning

a. Theater army headquarters submits projections of personnel requirements to the Department of the Army, reflecting requirements from sources outside the theater by MOS and grade. The Department of the Army uses the submitted estimates for—

(1) Planning input into the training base to meet projected requirements.

(2) Planning input into advanced individual training and technical training.

(3) Allocating personnel, alerting CONUS in-

stallations of forthcoming requirements, and estimating transportation requirements.

b. Direct support personnel units send daily to the PAC replacement element files containing identification of supported units and information on existing and projected vacancies. These personnel units prepare the vacancy files from information contained in the command record file and use them to request individual and unit replacements. The replacement element of the PAC assigns replacements daily to fill these requirements, subject to priorities established by theater army headquarters.



CHAPTER 17

PERSONNEL—ARMY MEDICAL SUPPORT

Section I. INTRODUCTION

17-1. General

a. The functions of hospitalization and patient evacuation are the responsibility of the Deputy Chief of Staff for Personnel (DCSPER), DA.

b. As a member of the DA special staff, The Surgeon General (TSG) has Army staff responsibility for the management of health services for the Army. He has staff responsibility for—

(1) Planning, directing, and supervising health services for the Army and, as directed, for other services, agencies and organizations.

(2) Establishing health standards applicable to personnel of the Army.

(3) Program and budget functions relating to medical activities.

(4) Technical review and evaluation of nonmedical materiel to determine possible existence of health hazards.

(5) Technical review and evaluation of medical organizations for the support of the Army.

(6) Technical review, evaluation, coordination, and direction of medical materiel programs. Medical supply and the maintenance of medical supplies and equipment is a subfunction of the medical materiel program, and the overall health care system, and not a part of the greater logistic system. While operating under the basic DA policies, The Surgeon General is responsible for es-

tablishing and implementing appropriate policies and procedures. The surgeon at each echelon of command is responsible for the implementation, coordination, and direction of DA medical materiel programs (AR 40-61). In this connection, the management of medical materiel will not be included with the management of other commodities without approval of TSG. Paragraph 2-10, AR 11-8, addresses the logistic responsibilities of TSG.

17-2. Medical Resources

a. Manpower is one of the ultimate keys to success on the battlefield, and conservation of manpower is the driving force behind the health services effort. Manpower conservation is accomplished by utilizing a totally integrated health services system to achieve maximum reduction of medical noneffectiveness. This system includes preventive medicine, evacuation, hospitalization, veterinary and dental support, and the prompt supply of medical equipment and materiel in the quantities required for the forces supported.

b. General supervision of the total health services effort employs the six principles of field medical support: continuity, control, proximity, flexibility, mobility, and conformity. Each principle is discussed below.

Section II. PRINCIPLES OF FIELD MEDICAL SUPPORT

17-3. Continuity

Medical support must be continuous. Treatment interruptions cause increased morbidity and mortality. Once begun, treatment terminates with a return to duty, discharge or death. Optimum standardized procedures will assure the accomplishment of treatment (and other medical functions) appropriate to the means and situation at each level.

a. The hospitalization-evacuation system is based on lower organizational levels of health services being supported by the next higher levels. Each has the responsibility to evacuate patients only to the rearmost medical facility of its own organization level.

b. Patients are evacuated no farther to the rear than warranted by their physical condition or the military situation. The command establishes the

maximum period of noneffectiveness that patients may be held for treatment. Patients whose requirements will exceed this prescribed limit are evacuated.

c. Medical plans must be simple, particularly in the combat area. Facilities must not be immobilized by long and/or complicated treatment procedures. Injuries or illnesses which can be successfully treated with relatively simple surgery or available medicines, are treated in forward areas. This treatment is usually limited to emergency measures to preserve life and limb, to preclude undue suffering, and to prepare the patient for further evacuation.

17-4. Control

Control of medical resources must rest with the medical commander or medical staff officer.

a. If the medical support system is to respond to the commander's plans in a timely manner, the surgeon responsible for its direction must be kept informed of the operations of the medical units. To insure economic utilization and control, medical units are not attached to the supported units.

b. The objective of military medicine is to conserve trained manpower; in some situations, medical means must be employed to do the most good for the greatest number. In emergencies, when a wide disparity exists between the requirements for medical support and the means available, it may become necessary to emphasize care for those patients who can be returned to immediate duty, rather than those more seriously injured.

c. The treatment at each level of the medical support system must be commensurate with available resources. Medical resources are limited. It is essential, therefore, that control of medical resources be retained at the highest medical level consistent with the tactical situation.

17-5. Proximity

The medical means must be as close to combat operations as the time/distance factor and the tactical situation permit. Prompt collection, sorting, and evacuation of patients must be provided.

a. Reduced morbidity and mortality depend on the speed with which medical treatment can be initiated. In support of a tactical operation, the medical planner has two alternatives. He must move patients to a medical treatment facility, or move the medical facility to the patients. Two factors will govern the choice: the military situation, and the patient's condition. The medical facility must not interfere with combat operations

or be subjected to enemy interference; yet, its remoteness must not endanger the patient's recovery and survival because of delay enroute to the medical facility. Close medical support locations utilizing Army air ambulances are, therefore, quite different from those facilities where litter-bearers are employed over difficult terrain.

b. In forward areas, medical treatment facilities are positioned as far forward as possible prior to an attack, are moved to maintain contact with units they support, and are displaced to the rear prior to the start of any retrograde movement. In this manner, they can provide early rapid resuscitative care prior to evacuation of patients.

17-6. Flexibility

Medical support must be flexible. Altered tactical plans or operations may necessitate a redistribution/relocation of medical resources. The medical commander and staff must be positioned to permit shifting their resources to meet the changing requirements. Alternate plans and a medical reserve are essential. Excess medical troops and/or medical facilities should not be committed or established.

17-7. Mobility

Supporting medical treatment units must maintain contact with units they support. It follows, then, that medical elements must have mobility comparable to that of the units they support.

a. A unit's mobility is measured by its ability to move its personnel and equipment with organic transportation.

b. When committed to patient care, medical units regain their mobility by prompt evacuation or transfer of patients. A medical unit's mobility is hampered by an accumulation of patients. When a unit has been unable to transfer patients, it may have to leave a small holding detachment with the accumulated patients to enable the main part of the unit to move.

17-8. Conformity

Conformity with the tactical plan is essential in the provision of field medical support. By an analysis of the commander's plan of operation, medical planners determine the medical requirements to provide adequate medical support at the right time and place.

Section III. ARMY MEDICAL SUPPORT ORGANIZATION

17-9. General

The field medical support organizations are structured to support the various tactical organizations in a theater of operations. The organizations that receive field medical support are found at unit, division, field army, and communications zone (COMMZ) levels. Levels of medical support extend rearward from forward operational areas in an integrated and continuous system to the zone of interior (ZI).

a. Unit Level. Unit level medical support includes preventive medicine activities, acquisition of the sick and wounded, emergency medical treatment (EMT), and evacuation from the point of illness or injury to initial treatment at the aid station. Unit level medical support is provided by medical elements assigned or attached to battalion or comparable units of the combat arms. Units without organic medical elements receive unit level medical support on an area basis from the nearest medical facility.

b. Division Level. Division level medical support primarily includes: evacuating patients from unit level aid stations; and, providing division level medical treatment and area medical support to nearby units without organic medical elements. This medical support is provided by the division medical battalion. Upon request, Army aeromedical evacuation will be provided by the field army medical brigade. Separate brigades and armored cavalry regiments receive division level medical support from assigned, attached or nearby medical companies.

c. Field Army Level. Field army level medical support provided by the field army medical brigade is not limited to but includes: evacuating patients from supported divisional and nondivisional units; providing resuscitative and/or definitive medical treatment; and providing area medical support within the field army area.

d. Communications Zone Level. Communications zone medical support provided by the medical command is not limited to but includes: surface evacuation of patients from the field army; area medical support in the COMMZ; and, resuscitative and/or definitive medical treatment at COMMZ hospitals. Air evacuation from the field army is a responsibility of the Air Force.

17-10. Area Medical Support

This concept involves the delineation of support responsibility by geographical area. It includes but is not limited to the provision of unit level medical support for organizations without an organic medical capability. Medical units for this purpose are allocated on the basis of troop strength and location. They are established and positioned when justified by requirements.

17-11. Capability

Within a theater of operations, the treatment capability of successively higher organizational levels of field medical support (unit, divisional, field army and communications zone) includes the capabilities of all lower organizational levels.

Section IV. MEDICAL TREATMENT FACILITIES IN THE CONTINENTAL UNITED STATES

17-12. General

The Surgeon General commands Army Medical Department personnel, organizations and facilities as assigned, including the class II units under TSG command. In addition, he exercises technical staff supervision over all other medical facilities and units of the Army. Restated, medical installations and activities in the continental United States are under the command of TSG (class II) or under the United States Continental Army Command (class I). To avoid fragmentation of resources and to improve medical organization and management, all Army medical department activities (MEDDAC) at each Army class I installation which have a hospital facility are or-

ganized into a single, integrated, functional unit. This unit or MEDDAC is organized under a single table of distribution and allowances. Each individual medical facility is identified by an appropriate paragraph.

a. At other installations, without a hospital, the clinics and other medical elements are included as part of the servicing MEDDAC.

b. The medical support for installations with class II hospitals, and for those installations in the immediate vicinity, is usually organized under the control of and provided by the commander of the class II hospital.

17-13. New Facilities

The Surgeon General in coordination with the Chief of Engineers prepares preliminary studies and plans for construction of hospitals and other

fixed medical and dental facilities. The Surgeon General programs construction requirements based on the needs, functions, and missions to be performed by the Army Medical Department.

Section V. MEDICAL EVACUATION AND HOSPITALIZATION**17-14. General**

a. Patient evacuation entails the acquisition of patients from the battlefield or other locations and their movement from one medical treatment facility to another. The term "evacuation system" includes successive agencies and installations engaged in collection, treatment, transportation, and

hospitalization. This "system" of facilities includes and extends from the most forward aid station(s) to the rearmost installation, a general hospital. Each successive medical facility in the "system," from the forward combat area to the rear, usually is capable of providing more extensive or more intricate medical care. Figure 17-1

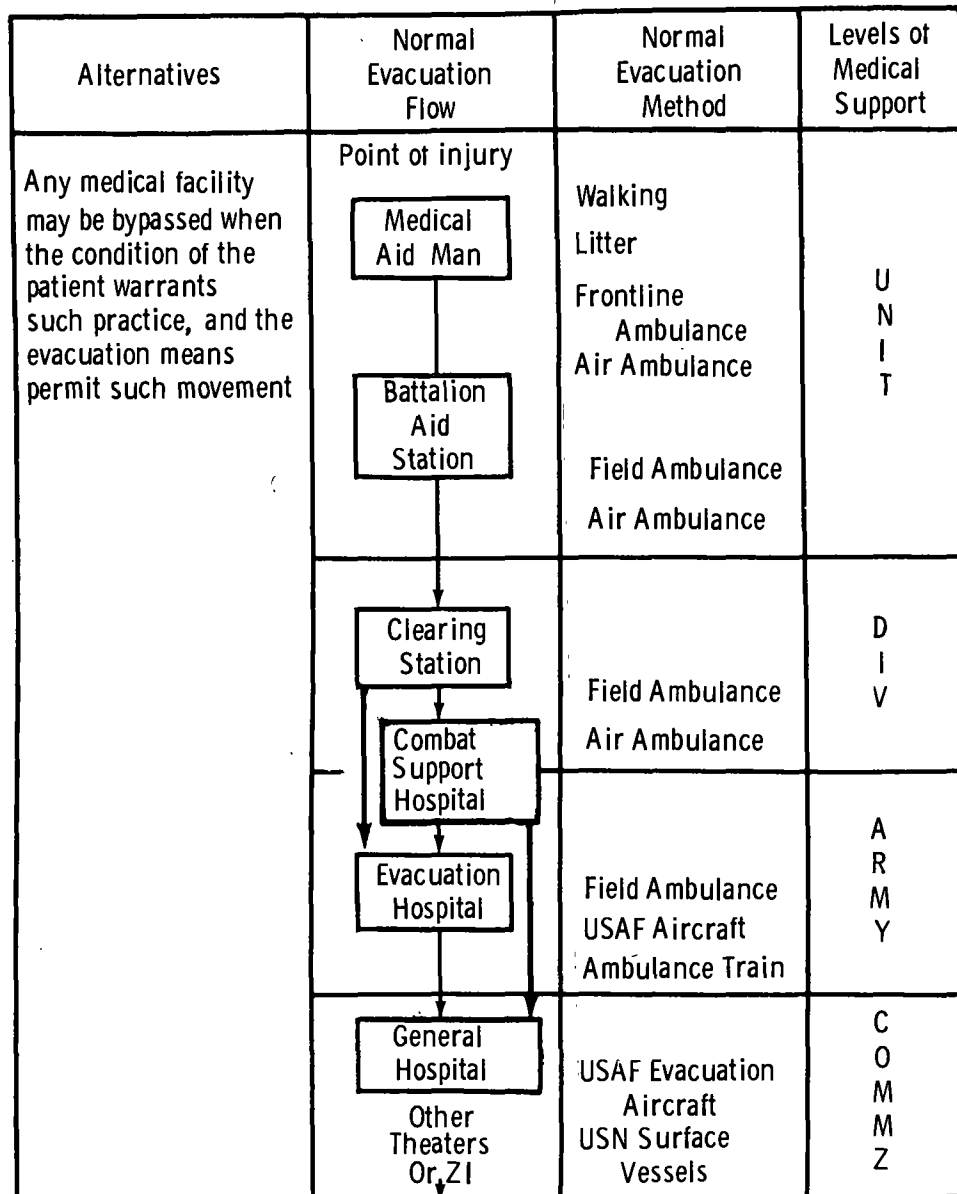


Figure 17-1. Medical evacuation system.

depicts the patient evacuation flow within the theater of operations.

b. Patient evacuation is difficult even under the most favorable conditions. It must be done against a constant forward movement of troops and supplies, and interference with this forward movement must be minimized. Most patients are picked up as individuals in or from the forward combat zone and require individual care and treatment through all successive stages of the evacuation and hospitalization system.

17-15. Sorting (Triage) of Patients

a. Sorting (evaluation or triage) must be done whenever a patient(s) arrives or is seen by Army Medical Department personnel. It is repeated whenever a patient is moved in the evacuation system. Repeated sorting is mandatory to insure that patients receive the best possible medical care. Sorting includes the examination of sick and injured patients and decisions concerning their condition in an effort to insure that they are properly routed to, and within, the appropriate medical facility. Sorting also includes establishing a priority for treatment and assisting in determining the ultimate destination of each patient as early as possible. Sorting is the key to the effective management of patients, for they must not be evacuated farther than their physical condition or the military situation requires. Every "overevacuated" case imposes upon three agencies. These include the patient's unit, the replacement system, and the Army Medical Department. The patient's unit will be understrength until he is discharged to duty with his unit or he is replaced. The replacement system, in the patient's continued absence, must procure, equip, train, and transport his replacement. The Army Medical Department units needed to care for the same patient would provide the added evacuation, as well as treatment. One such case would not be impressive, but overall, indifferent sorting could jeopardize combat operations. Unnecessary evacuation of patients could be tantamount to subsidized straggling. When decision for hospitalization is made, the illness or injury must be incapacitating or of such nature that significant consequences would result if the patient were returned immediately to duty. This decision is often difficult when there is little time for observing patients. However, when the tactical situation permits, reasonable doubt must be resolved in favor of the patient.

b. While the preceding paragraph describes sorting as customarily performed, contingency

plans must exist for emergencies. In a disaster or mass casualty situation, when an overwhelming number of patients vastly exceeds the available Army Medical Department resources (personnel and/or materiel), and there is no possibility of caring for the patients in a reasonable length of time, routine sorting procedures must be changed. Under critical conditions, the most experienced medical officer is usually delegated to supervise sorting or triage. The effort will be to assure beneficial care for the largest number of patients. The critically ill, with the poorest chances for survival, will be kept as comfortable as possible but will receive deferred treatment while those with a better chance to survive will receive priority for the limited care available.

17-16. Evacuation Lag

Evacuation delays will occur frequently for a variety of reasons. Collectively, the delays are referred to as "evacuation lag." If not considered in medical planning, medical facilities ~~will be~~ mobilized and the evacuation system ~~will be~~ retarded. The most significant causes of evacuation lag are—

- a. Enemy action and combat requirements.
- b. Nonavailability of transportation.
- c. Treatment time required en route.
- d. Delayed receipt of the evacuation requests.
- e. Road, terrain, and weather conditions.

17-17. Theater Patient Evacuation Policy

a. The theater patient evacuation policy is established by the Secretary of Defense, with the advice of the Joint Chiefs of Staff and on the recommendation of the theater commander. The policy states, in number of days, the maximum period of noneffectiveness that patients may be held within the command for treatment. The policy does not imply that a patient is held in the theater for the entire period of the theater evacuation policy. Patients who are not expected to return to duty within the number of days expressed in the theater evacuation policy are evacuated as soon as their medical condition permits and responsible medical authorities have determined that travel will not aggravate their disabilities. The application of any evacuation policy is a management tool in the selection of patients, since evacuation requires close and continuing coordination from all command surgeons concerned. The efficiency of medical support operations depends on the effective distribution of patients to facili-

ties capable of providing the required treatment. The time period stated in the theater patient evacuation policy commences with the date of admission to the first hospital. The total time a patient spends in all hospitals in the theater for a single episode of illness (i.e., uninterrupted hospitalization) should not exceed the number of allowable days of hospitalization stated in the theater patient evacuation policy.

b. The theater evacuation policy specified has direct impact on—

(1) The number and type of medical units in the combat zone and the COMMZ.

(2) Medical materiel.

(3) Hospital construction and engineer support.

(4) Volume and type of transportation.

(5) Theater personnel replacement requirements.

(6) The number of hospital beds required in CONUS to support the oversea theater. The shorter the theater patient evacuation policy is, the fewer the hospitals in the theater and the greater the number of beds required in CONUS. A longer theater patient evacuation policy will increase the number of hospital beds in the theater and decrease the CONUS requirements.

c. Subordinate commands may establish intra-theater patient evacuation policies within the limits of the theater patient evacuation policy and subject to approval by the theater commander. For example, a short evacuation policy usually is established for combat zone hospitals so as not to impair their mobility or their capability to accommodate surges of patients. Intratheater patient evacuation policies must be flexible and changed as dictated by the tactical situation. Intratheater evacuation policies may differ among the hospitals depending on their location, facilities, staffs, and the types of patients received.

17-18. Medical Regulating

a. Medical regulating is the planned, controlled, synchronized system in an effort to insure optimum utilization of resources in the medical evacuation system (para 17-11).

b. Considerations in medical regulating include:

(1) Number and location of patients by diagnostic category.

(2) Patients' condition.

(3) Patients awaiting surgery or other treatment (expressed as backlog in hours).

(4) Current bed status and hence, workload of treatment facilities (i.e., beds available for patients and beds occupied).

(5) Location and status of utilization of specialized treatment capabilities.

(6) Current and anticipated tactical situation throughout the theater.

(7) Availability of transportation.

(8) Location of heliports, airfields, railheads and seaports.

c. Medical regulating procedures are under the technical control and supervision of the medical regulating officers (MRO) positioned at various medical headquarters throughout the theater army. The medical regulating officers coordinate with medical organizations throughout the entire command, and require information from them on the status of their patients.

17-19. Hospital or Inpatient Care

The term "hospital care" applies to that medical care and treatment for the more seriously ill or injured, or for those patients requiring extended care, as opposed to emergency medical treatment provided outpatients at a hospital. Continual effort must be exerted to return sick or injured personnel to duty as rapidly as possible. Evacuation and hospitalization must always be considered jointly, for they are interdependent in the achievement of efficient operation.

17-20. Medical Civic Action

Medical civic action is medical support provided civilians, preferably through or in reinforcement of the available indigenous medical capability. Its aim is to contribute to the civilians' general welfare and to improve the prestige of the host country medical support. Improvements in those areas, in turn, will reflect credit on the allies as well as on the host country with the indigenous population. Poor health and sanitary conditions may be anticipated in many potential areas of future operations. Such conditions may include inadequate potable water, sewage disposal, housing, enforced sanitary standards, and medical care facilities. Some medical civic action will ensue at all levels of conflict. Its greatest need and importance, however, are in stability operations. The basic principles of medical civic action are:

a. Medical civic action will not interfere with the health service support for US personnel.

b. Although designed to restore, enhance or maintain public confidence, such programs are not

an intentional part of the psychological operations program.

c. While medical civic action will not necessarily solve all health problems, it will supplement public health programs with which it must be coordinated.

d. While medical civic action may extend host government public or private health facilities into remote or unsafe areas, it will not duplicate or otherwise compete with established domestic health services.

e. Emphasis will be directed to solving simple health problems that benefit many people, rather than a major effort to solve major problems of a few people. Serious illness requiring long-term treatment will be referred to the civilian public health service, and transportation to support this referral may be provided.

f. Long-term benefits can be achieved by teaching personal hygiene and sanitation.

g. Civilians injured as a result of military oper-

ations will be provided appropriate treatment. Indigenous personnel treated for injuries should be interrogated to determine the cause of injury. Reports of such treatment will be provided to proper authorities.

h. Medical civic action will be coordinated with ACoFS, operations, and ACoFS, civil-military operations, to direct effort and assure its compatibility with tactical operations.

i. Caution will be exercised in distributing medical supplies to preclude their diversion to the enemy or illicit markets. Locally developed policy and procedures for dispensing medical supplies are required to prevent or minimize the diversion of these civic action supplies. Personnel will be instructed and kept aware of this undesirable possibility.

j. Supply planning for medical civic action is required to insure the timely arrival of supplies for pediatric, gynecological, and geriatric patients.



CHAPTER 18

MILITARY DISCIPLINE

(STANAG 2067, SEASTAG 2067)

Section I. GENERAL

18-1. Responsibility

To maintain discipline, law and order is a responsibility of command. Commanders and staff officers must anticipate the effect of their plans and activities on discipline, law and order in the command. Discipline is the state of order and obedience among military personnel. Manifestations of discipline are willing response to commands under all conditions; proper military conduct; and strict observance of military regulations, civil laws, and customs.

18-2. Objectives

The major objectives of discipline, law and order are—

a. Combat effectiveness (success in combat is the ultimate aim of discipline).

b. Development of habits and attitudes conducive to obedience.

c. Minimum losses in manpower because of trials, punishment, and confinement.

18-3. Military Justice

a. Military justice is the application of military law to persons subject thereto who are accused of the commission of offenses under the Uniform Code of Military Justice (UCMJ). Military justice is administered in accordance with the UCMJ, the Manual for Courts-Martial, and the decisions of the courts. Included in the system are the procedures relating to trial by courts-martial and to nonjudicial punishment for minor offenses.

b. The staff judge advocate has direct staff responsibility for the administration of military justice in the command (FM 101-5).

Section II. MILITARY POLICE

18-4. Provost Marshal

The provost marshal is the commander's adviser on all law enforcement and related matters. Depending on the employment and mission of the particular command concerned, the provost marshal provides the commander professional advice and recommendations, as may be applicable, within the following technical and functional areas:

a. Enforcement and maintenance of military laws, orders, and regulations.

b. Circulation control, to include vehicular traffic, convoys, refugees, and individuals.

c. Route security/reconnaissance and convoy escort.

d. Crime prevention and investigation.

e. Police intelligence activities, to include data developed in conjunction with indigenous police forces, collection, evaluation, and dissemination of law enforcement and security data.

f. Physical security.

g. Enemy prisoner of war, civilian internee, and detainee activities.

h. Confinement and correctional treatment.

i. Civil disturbance and disaster control operations; friendly and indigenous.

j. Rear area protection (RAP) activities. The potential of this functional capability is of particular value to support command base defense and RAP operations.

k. Stability operations and activities, to include police internal defense operations, combined and joint police operations in towns and on roadways, police intelligence data, police aspects of popula-

tion and resources management, and police training and advisory activities.

18-5. Support of Stability Operations

In support of stability operations, military police may become directly involved with civilian controls and enforcement of emergency regulations. In addition to their normal functions, military police in stability operations place special emphasis on circulation control, physical security, civil

disturbances and riot control, handling of prisoners, food and other resources control, organization and operation of a police intelligence system in civilian communities, and other specialized techniques for control of civilians. Military police can provide plans, advice, training, and supervision to civilian police personnel in population and resources management measures, technical police operations, and investigations. Additional details on the military police role during stability operations are contained in FM 19-50.

Section III. RELATED ACTIONS

18-6. Straggler Control

a. Stragglers are military personnel in the combat zone or on maneuvers who are away from their unit without proper authority. Straggler control is a function of command at all echelons and is conducted by commanders throughout their areas of responsibility.

b. A straggler line is an MP control line, which may be manned or unmanned. The prevailing type of action determines the specific location of the line. Straggler lines are normally along lateral lines of communication and are easily identifiable terrain features. Normally, straggler lines of adjacent units connect. Military police apprehend stragglers, line crossers, and infiltrators in the rear of the line.

c. While straggler posts are not established routinely, they may be organized at critical points, usually on the natural lines of drift to the rear. When established, posts are interconnected by communications, and patrols operate between posts. The posts are located in defilade and concealed from enemy observation. Normally, traffic control posts and traffic patrols have the additional duty of straggler control.

d. Straggler collecting points are designated locations (usually an MP station or headquarters) where stragglers are assembled for return to their units or for evacuation to the rear. The provost marshal plans and coordinates the establishment of these collecting points and arranges transportation when required. Collecting points are near a medical facility to permit medical sorting of stragglers.

18-7. Establishment of Confinement Facilities

The PERSCOM, TASCOT, operates confinement facilities and rehabilitation centers for US military prisoners and, when requested, relieves the combat forces and area support commands of such prisoners within theater army policies. Prisoners confined in these facilities normally include those who have been tried and whose sentences do not include punitive discharges, or those who are potentially restorable to duty. The primary purpose of these facilities is to train US military prisoners for return to duty. Depending upon the commands' evacuation policy, all other US military prisoners normally are evacuated to the continental United States.

CHAPTER 19

GRAVES REGISTRATION

(STANAG 2070)

19-1. General

a. Graves registration in support of military operations provides for—

(1) Search, recovery, and evacuation of remains of deceased military personnel, certain civilians, and Allied and enemy personnel as required.

(2) Identification and temporary disposition of remains.

(3) Recovery and disposition of personal effects.

(4) Establishment, operation, and maintenance of temporary military cemeteries.

(5) Preparation of pertinent records and reports.

b. The ACofS, personnel (G1), has staff responsibility for graves registration service in tactical commands. The ACofS, services, have this responsibility in the TASCOC and FASCOM.

c. Details on organization, functions, and operations relating to the handling of deceased personnel in the theater of operations are provided in FM 10-63.

19-2. Reasons for Graves Registration

a. An efficient graves registration service maintains adequate sanitation, sustains military and

civilian morale, and complies with the laws of land warfare. The morale factor includes that of the military and the civilian population. Much of the work of the graves registration service is directed towards maintaining harmonious public relations with the civilian population of the United States. Prompt evacuation and burial normally satisfies the requirements of preserving adequate sanitation of the area and morale of the combat troops.

b. The laws of land warfare require that each belligerent establish a graves registration service to insure prompt and adequate care for deceased enemy personnel.

c. The system of graves registration insures—

(1) Prompt and accurate identification of remains.

(2) Evacuation of remains to a cemetery and proper interment.

(3) Marking and registering of graves so that remains may be disinterred and final disposition accomplished.

(4) Search and attempted recovery of remains.

(5) Forwarding of personal effects found on the remains to the proper recipient.

(6) Prompt, accurate, and complete administrative recording and reporting.



CHAPTER 20

ENEMY PRISONERS OF WAR AND CIVILIAN INTERNEES/DETAINEES

(STANAG 2033, 2044; SEASTAG 2033, 2044; SOLOG 69)

20-1. General

a. In the treatment of enemy prisoners of war (PW) and civilian internees/detainees, the United States adheres to the customary laws of land warfare and to the following international agreements (DA Pam 27-1):

(1) Geneva Convention Relative to the Treatment of Prisoners of War of 12 August 1949, hereinafter referred to as the Geneva (PW) Convention.

(2) Geneva Convention Relative to the Protection of Civilian Persons in Time of War of 12 August 1949, hereinafter referred to as the Geneva (Civilian Persons) Convention.

(3) Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field, 12 August 1949, hereinafter referred to as the GWS.

(4) Geneva Convention for the Amelioration of the Wounded, Sick, and Shipwrecked Members of Armed Forces at Sea, 12 August 1949, hereinafter referred to as GWS Sea.

(5) Hague Convention No. IV of 1907, hereinafter referred to as the Hague Regulations.

b. The governing motive of these conventions is to provide for the humane treatment of all personnel in the custody of parties to a conflict. The conventions regulate in detail the treatment of PW and civilian internees, and detainees including—

- (1) Care, food, and clothing.
- (2) Discipline and punishment.
- (3) Labor and pay.
- (4) External relations.
- (5) Representation.
- (6) Information agencies, centers, and bureaus.
- (7) Termination of captivity.

c. The Geneva (PW) Convention provides that upon the outbreak of hostilities, and in all cases of occupation, parties to the conflict establish an official PW information center. The convention also provides for the creation of a central PW information agency in a neutral country. These two

activities assist in the collection and exchange of information pertaining to PW held by parties to the conflict. The PW information center collects personal valuables left by PW who are repatriated or released, or who have escaped or are deceased, and transmits these valuables to the powers concerned. The branch PW information centers normally retain the personal effects of enemy dead in the oversea area rather than forwarding them to the continental United States.

d. A separate civilian internee information center assists in the collection and exchange of information pertaining to civilian internees held by parties to the conflict. There are branch civilian internee information centers in the theater of operations as required. The civilian internee information center and its branches perform the same functions with respect to civilian internees that the PW information center and its branches do with respect to PW. The branch civilian internee information center may be adjacent to the branch PW information center in the theater of operations.

e. Detailed coverage of the handling of enemy PW, civilian internees/detainees is contained in FM 19-40. Provisions of treaties governing land warfare may be found in DA Pam 27-1.

20-2. Terms

a. *Prisoners of War*. Upon capture, persons belonging to one of the following categories are classified by the Geneva (PW) Convention as PW:

(1) Members of the armed forces of an enemy party to the conflict, as well as members of militias or volunteer corps forming part of these armed forces.

(2) Members of other militias and of other volunteer corps, including those of organized resistance movements, belonging to an enemy party to the conflict, provided they—

(a) Are commanded by a person responsible for his subordinates.

(b) Have a fixed distinctive sign recognizable at a distance.

(c) Carry arms openly.

(d) Conduct their operations in accordance with the laws and customs of war.

(3) Members of regular armed forces who profess allegiance to a government or an authority not recognized by the detaining power.

(4) Persons who accompany the enemy armed forces without actually being members thereof (such as war correspondents and supply contractors), provided they have received authorization from the armed forces they accompany and have in their possession the prescribed identification cards.

(5) Members of crews of the merchant marine and the crews of civil aircraft of an enemy party to the conflict who do not benefit by more favorable treatment under any other provisions of international law.

(6) Inhabitants of a nonoccupied territory who, on the approach of the enemy, spontaneously take up arms to resist the invading forces, without having had time to form themselves into regular armed units, provided they carry arms openly and respect the laws and customs of war.

b. Civilian Internees/Detainees. Civilian internees or detainees are persons protected by the Geneva (Civilian Persons) Convention and who are interned or detained—

(1) For security reasons, in accordance with Article 78 of the convention.

(2) Because they have been convicted of an offense against the detaining power and sentenced to internment or detention pursuant to Article 68 of the convention.

c. Retained Personnel. The term “retained personnel” refers to certain categories of personnel exclusively engaged in medical or religious duties, such as medical personnel and chaplains. Retained personnel are not considered to be PW. For security purposes, however, and so that their services may be properly used, they remain in PW installations and receive treatment no less favorable than that of PW of equivalent rank. These personnel may be retained only for as long as their services are needed by the retaining power.

d. Protecting Power. The term “protecting power” refers to a neutral power that, with the consent of two opposing parties to the conflict, endeavors to safeguard the interests of one of the parties to the conflict and thereby acquires certain duties by virtue of the Geneva (PW) Convention. Representatives of the protecting power are permitted to visit PW wherever they are located.

The representatives report to the party to the conflict whose interest they represent concerning the treatment being accorded to personnel held as PW. Humanitarian agencies, such as the International Committee of the Red Cross, may be possible substitutes for a protecting power.

20-3. Objectives

The more important objectives sought in handling enemy PW and civilian internees/detainees include—

a. Acquisition of maximum intelligence information imposed by the laws of land warfare.

b. Prevention of escape and liberation.

c. Conservation of the handling agency's own resources.

d. By example, encouragement of proper treatment for friendly power's own personnel captured by the enemy.

e. Weakening of the enemy's will to resist capture.

f. Making maximum use of PW and civilian internees as sources of labor.

g. Institution of an information program designed to encourage maximum cooperation among the PW and to increase the number of defectors.

20-4. Principles

The principles used in achieving the objectives sought in handling PW and civilian internees/detainees include—

a. Provisions of humane treatment.

b. Prompt evacuation from the combat zone.

c. Provision of opportunity for interrogation.

d. Indoctrination of troops in the provisions of international agreements and regulations relating to PW and civilian internees.

e. Integration of the procedures for evacuation, control, and administration of PW and civilian internees with other combat service support operations.

20-5. Army Responsibilities

From the moment of capture, the Army is responsible for PW and civilian internees taken by its own forces. The Navy and the Air Force are responsible for PW and civilian internees captured by their respective forces until such time as the PW and the civilian internees are delivered to designated Army receiving points. After delivery to these receiving points, the Army is responsible for the PW and civilian internees. Specific Army responsibilities include—

- a. Evacuation from the receiving points.
- b. Internment.
- c. Medical care.
- d. Treatment.
- e. Education.
- f. Religious care.
- g. Employment and compensation.
- h. Repatriation.
- i. Operation of PW and civilian internee information centers.
- j. Maintenance of an appropriate office of record.

20-6. Prisoner of War and Civilian Internees in Stability Operations

a. *General.* Details on the handling of PW and civilian internees and detainees in stability operations are contained in FM 19-40.

b. *Control Measures.* The imposition of control measures during stability operations results in the capture and detention of insurgents, sympathizers, suspects, combatants who surrender under provisions of host country amnesty programs, and civilians who do not support the insurgents, as well as the confiscation of contraband critical materiel. Measures for handling, accountability, and disposition should include—

- (1) Segregation as soon as practicable.
- (2) Provision of local detention and interrogation facilities.
- (3) Provision for interrogation by host country police and intelligence personnel.
- (4) Documentation of circumstances of capture and recording in local police files for analysis of trends and patterns.

(5) Documentation and distribution of intelligence obtained.

(6) Trial of captured/detained personnel in accordance with international law and host country/US agreements.

(7) Rapid transfer of combatants who surrender under amnesty programs to rehabilitation centers.

(8) Identification of confiscated materiel, including circumstances of confiscation, and the safeguarding and turning over of the materiel to the appropriate authority when requested.

(9) Detailed accountability for captured/detained personnel while they are in the custody of US forces.

c. *Amnesty and Rehabilitation.* Amnesty, pardon, rehabilitation, a system of rewards, and reeducation are parts of the population and resources management program. Reward programs are instituted. Defectors or prisoners receive payment for information, capture of insurgent leaders, and turn-in of insurgent weapons and equipment. Defectors serve profitable uses in psychological operations directed toward the population to counteract insurgent propaganda. Amnesty and rehabilitation programs should include—

(1) Provisions, whenever possible, to allow disaffected members of the population to revert to the support of the government without undue fear of punishment for previous antigovernment acts.

(2) Equitable and scrupulously observed execution of the programs aimed at causing disaffection among the insurgents and their supporters.

(3) Rehabilitation of former insurgents and their supporters through a program of reeducation.



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APPENDIX A

REFERENCES

A-1. Army Regulations (AR)

10-5	Department of the Army.
11-8	Principles, Objectives, and Policies of the Army Logistics System.
(S) 11-11	Major Command Stockage Levels Worldwide (U).
11-14	Logistics Readiness.
27-10	Military Justice.
40-61	Medical Materiel Policies and Procedures.
59-106	Operation of Air Force Air Terminals.
(FOUO) 190-25	Captured, Missing, or Detained United States Army Personnel—Administration, Return and Processing.
310-1	Publications, Blank Forms, and Printing Management.
310-10	Orders.
310-25	Dictionary of United States Army Terms (Short Title: AD).
310-49	The Army Authorization Documents System (TAADS).
310-50	Authorized Abbreviations and Brevity Codes.
380-41	Control of COSMEC Material.
415-16	Army Facilities Components System (Military Engineering Construction Support Designs, Materiel and Planning Data).
600-10	The Army Casualty System.
600-30	Human Self Development.
630-5	Leave, Passes, Administrative Absence and Public Holidays.
672-5-1	Awards.
700-4	Supply and Maintenance Technical Assistance Program.
710-1	Centralized Inventory Management of the Army Supply System.
710-2	Materiel Management for Using Units, Support Units, and Installations.
725-50	Requisitioning, Receipt, and Issue System.
725-65	Operational Projects.
750-1	Army Materiel Maintenance Concepts and Policies.
750-51	Maintenance Assistance and Instruction Team (MAIT) Program.
755-5	Collection, Classification, Consolidation, and Processing of Retrograde Materiel.

A-2. Department of the Army Pamphlets (DA Pam)

27-1	Treaties Governing Land Warfare.
608-2	Your Personal Affairs Handbook.
608-4	For Your Guidance.
690-80	Use and Administration of Local Civilians in Foreign Areas During Hostilities.
710-13	Selected Item Management System.

A-3. Joint Chiefs of Staff Publications (JCS Pub)

1	Dictionary of US Military Terms for Joint Usage (Short Title: JD).
(FOUO) 2	Unified Action Armed Forces (UNAAF) (U).
(C) 3	Joint Logistics and Personnel Policy and Guidance (U).

A-4. Field Manuals (FM)

5-20	Camouflage.
5-162	Engineer Construction and Construction-Support Units.
8-10	Medical Support, Theater of Operations.
8-15	Medical Support in Divisions, Separate Brigades, and the Armored Cavalry Regiment.
8-21	The Field Medical Support Guide.
9-6	Ammunition Service in the Theater of Operations.
10-8	Airdrop of Supplies and Equipment in the Theater of Operations.
10-13	Supply and Service Reference Data.
10-63	Handling of Deceased Personnel in Theaters of Operations.
10-67	Petroleum Supply in Theaters of Operations.
11-23	Theater Army Communications Command.
12-2	Personnel and Administrative Support in Theaters of Operation.
14-3	Comptroller Support in Theaters of Operation.
16-5	The Chaplain.
19-4	Military Police Support, Theater of Operations.
19-40	Enemy Prisoners of War and Civilian Internees.
19-50	Military Police in Stability Operations.
24-1	Tactical Communications Doctrine.
27-10	The Law of Land Warfare.
29-2	Organizational Maintenance Management.
29-6	The Personnel Command.
29-10	Supply Management in the Field Army.
29-20	Maintenance Management in Theaters of Operations.
29-23	Direct Support Maintenance Battalion (Nondivisional).
29-24	General Support Maintenance Battalion.
30-5	Combat Intelligence.
31-11	Doctrine for Amphibious Operations.
31-12	Army Forces in Amphibious Operations (The Landing Force).
31-21	Special Forces Operations—US Army Doctrine.
31-23	Stability Operations—US Army Doctrine.
(C) 31-40	Tactical Cover and Deception (U).
31-82	Base Development.
31-75	Riverine Operations.
31-85	Rear Area Protection (RAP) Operations.
(C) 32-5	Signal Security (SIGSEC) (U).
(C) 32-20	Electronic Warfare (Ground based) (U).
33-1	Psychological Operations—US Army Doctrine.
38-1	Logistics Management.
38-2	Logistics-Inventory Management.
38-5	Logistics, Maintenance Management.
41-10	Civil Affairs Operations.
54-2	The Division Support Command Separate Brigade Support Battalion.
54-3	The Field Army Support Command.
54-4	The Support Brigade.
54-7	Theater Army Support Command (TASCOM).
55-1	Army Transportation Services in a Theater of Operations.
55-10	Army Transportation Movements Management.
55-11	Army Movement Control Unit (to be published).
55-20	Army Rail Transport Operations.
55-30	Army Motor Transport Operations.
55-40	Army Combat Service Support Air Transport Operations.
55-60	Army Terminal Operations.

57-1	US Army/US Air Force Doctrine for Airborne Operations.
61-100	The Division.
100-5	Operations of Army Forces in the Field.
100-15	Larger Units—Theater Army-Corps.
100-27	US Army/US Air Force Doctrine for Tactical Airlift Operations.
100-30	Tactical Nuclear Operations.
(Test)	
101-5	Staff Officers' Field Manual—Staff Organization and Procedure.
101-10-1	Staff Officers' Field Manual—Organization, Technical, and Logistic Data (Unclassified Data).
101-10-2	Staff Officers' Field Manual—Organization, Technical, and Logistic Data (Extracts of Tables of Organization and Equipment).
(S) 101-10-3	Staff Officers' Field Manual—Organization, Technical, and Logistic Data (Classified Data) (U).

A-5. Technical Manuals (TM)

5-301	Staff Tables of Engineer Functional Components System.
5-302	Construction in the Theater of Operations.
5-303	Bills of Materials and Equipment of the Engineer Functional Components System.
5-700	Field Water Supply.
9-1300-206	Care, Handling, Reservation and Destruction of Ammunition.
750-210	Procedures for Rapid Development, Redeployment and Retrograde: Facility Development Guide.

A-6. Supply Bulletins (SB)

(C) 38-26	Ammunition Supply Rates (U).
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A-7. Other Publications

UCMJ	Manual for Courts-Martial United States 1969 (Revised edition).
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APPENDIX B

ABBREVIATION INDEX

		Paragraph	Page
A			
ACofS	Assistant Chief of Staff -----	4-16a (2)	4-5
ACSC-E	Assistant Chief of Staff for Communications-Electronics -----	5-2b	5-1
ADP	automatic data processing -----	2-3d	2-2
ADPC	automatic data processing center -----	9-10	9-6
ADPE	automatic data processing equipment -----	1-2b	1-1
AFCS*	Army Facilities Component System -----	13-2e	13-1
AG	Adjutant General -----	9-36	9-28
ALOC*	air lines of communication -----	11-27a (2)	11-8
ASG*	area support group -----	3-4b (3)	3-1
ASP	ammunition supply point -----	9-32a	9-22
ASR	available supply rate -----	9-32e	9-24
B			
BDP	base development plan -----	4-11b	4-3
C			
CA	civil affairs -----	2-3h	2-3
CBR	chemical, biological and radiological -----	2-2a	2-1
C-E	Communications-Electronics -----	3-13b (3)	3-13
CLSC	COMSEC logistic support center -----	3-13b (1)	3-13
CLSS*	closed loop support system -----	10-4c	10-3
CLSU	COMSEC logistic support unit -----	3-13b (1)	3-13
CMMI	command maintenance management inspection -----	10-13b	10-10
CMO	civil military operations -----	3-14	3-13
COMINT	communications intelligence -----	5-5a	5-2
COMMZ	communications zone -----	3-3	3-1
COMSEC	communications security -----	3-13b (1)	3-13
CONARC	United States Continental Army Command -----	9-3b (1)	9-2
CONUS	Continental United States -----	3-3	3-1
CPR	civil personnel regulation -----	13-7	13-4
COSCOM	corps support command -----	3-4b (1)	3-1
CRAF	Civil Reserve Air Fleet -----	11-27a (1)	11-8
CS*	combat support -----	1-3	1-1
CSS	combat service support -----	1-1a	1-1
CTA	common table of allowances -----	9-17a (1)	9-9
CTOC	corps tactical operations center -----	9-32f	9-25
D			
DA	Department of the Army.		
DGA	Defense Communications Agency -----	5-1d	5-1
DCS	Defense Communications System -----	3-12f (4)	3-13
DCSLOG	Deputy Chief of Staff for Logistics -----	10-7c	10-6
DCSPER	Deputy Chief of Staff for Personnel -----	17-1a	17-1
DISCOM	division support command -----	3-4b (1)	3-1
DS	direct support -----	3-12d	3-10
DSA	Defense Supply Agency -----	9-10	9-6
DSS*	direct support system -----	9-21c	9-11
DSU	direct support unit -----	9-19a	9-10
DTOC	division tactical operations center -----	9-32f	9-25
DX	direct exchange -----	10-4c	10-3

* Abbreviation not contained in AR 810-50.

		Paragraph	Page
E			
EMT	emergency medical treatment -----	17-9a	17-8
ENCOM*	engineer command -----	3-9c	3-8
ESM	Electronic Warfare Support Measures -----	5-5a	5-2
EW	Electronic Warfare -----	5-5c	5-2
F			
FASCOM	field army support command -----	3-12f (3)	3-12
FATOC	field army tactical operation center -----	9-32f	9-25
FWMAF	Free World Military Assistance Forces -----	12-5a (1)	12-1
G			
G1	assistant chief of staff, personnel -----	14-11	14-2
G4	assistant chief of staff, logistics -----	11-24	11-7
GS	general support -----	3-12d	3-10
GSU	general support unit -----	9-47c	9-30
GWS	Geneva Convention for the Amelioration of the condition of the wounded and sick in Armed Forces in the Field, 12 Aug 1949 -----	20-1a (3)	20-1
J			
J4	logistics directorate -----	11-1c	11-1
JCS	Joint Chiefs of Staff -----	3-8	3-7
JMTB	Joint Military Transportation Board -----	11-1c	11-1
JPO	Joint Petroleum Office -----	9-30e (3)	9-17
JUWTF	Joint Unconventional Warfare Task Force -----	8-5c	8-2
L			
LOC	lines of communication -----	2-2a	2-1
LOTS	logistics over the shore operations -----	11-9h	11-3
LRO*	logistics readiness officer -----	8-2	8-1
M			
MAAG	Military Assistance Advisory Group -----	8-5c	8-2
MAC	Military Airlift Command -----	4-1c	4-1
MAIT*	Maintenance Assistance and Instruction Team -----	10-13b	10-10
MATCOM*	materiel command -----	3-12d	3-10
MCC*	movement control center -----	9-10	9-6
MEDCOM	medical command -----	3-12d (2)	3-11
MEDDAC	medical department activity -----	17-12	17-3
MEL*	maintenance expenditure limit -----	12-5a (3)	12-1
MI	military intelligence -----	3-12f (5)	3-13
MILSTRIP	Military Standard Requisitioning and Issue Procedures -----	9-21d	9-11
MILVAN	military-owned demountable container -----	12-7	12-3
MMC	materiel management center -----	3-19e	3-15
MOS	military occupational specialty -----	14-8c	14-2
MP	military police -----	3-19e	3-15
MRO	medical regulating office(r) -----	17-18c	17-6
MS+*	maintenance support positive -----	10-4a	10-3
MSC	Military Sealift Command -----	4-1c	4-1
MSR	main supply route -----	12-9a(1) (a)	12-4
MT	motor transport -----	3-19e (1)	3-15
MTDA	Modification Table of Distribution and Allowances -----	9-17a (1)	9-9
MTMTS	Military Traffic Management and Terminal Service -----	4-1c	4-1
MTOE	Modification Table of Organization and Equipment -----	4-10	4-3
N			
NICP	national inventory control point -----	9-10	9-6
NMP	national maintenance point -----	10-1b	10-1
O			
OPNAN	operation plan -----	4-11b	4-3
ORF*	operational readiness float -----	10-4b	10-3

* Abbreviation not contained in AR 310-50.

		Paragraph	Page
P			
PAC	personnel and administration center -----	16-3a	16-1
PERSCOM*	personnel command -----	3-12d (1)	3-11
POMCUS	prepositioning of materiel configured to unit sets -----	9-17a (2)	9-9
PSYOP	psychological operations -----	2-3h	2-8
PW	prisoner of war -----	2-3f	2-2
R			
R&R	rest and recuperation -----	15-3b	15-1
RAOC*	rear area operations center -----	4-16a (1)	4-5
RAP*	rear area protection -----	3-12b (3)	3-10
RCF*	repair cycle floats -----	10-4b	10-3
RPMA	real property maintenance activities -----	3-12c	3-10
RSR	required supply rate -----	9-32e	9-24
S			
SAL	special ammunition load -----	9-32f (1)	9-25
SALE*	special ammunition logistic element -----	9-32a	9-22
SALS*	Standard Army Logistics System -----	8-1a	8-1
SAPO	subarea petroleum office -----	9-30e (3)	9-17
SASP	special ammunition supply point -----	9-32a	9-22
SEASTAG	SEATO Standardization Agreement -----	1-1b	1-1
SEAVAN	commercial or Government-owned (or leased) shipping container -----	12-7	12-3
SIMS	Selected Item Management System -----	9-9	9-5
SOLOG	Standardization of Certain Aspects of Operations and Logistics -----	1-1b	1-1
SOP	standing operating procedure -----	11-23b (1)	11-7
STANAG	Standardization Agreement -----	1-1b	1-1
T			
TA	theater army -----	3-12e (2)	3-12
TAACOM*	theater army area command -----	3-4b (3)	3-1
TAADS	The Army Authorization Documents System -----	4-3a	4-1
TACCOM	theater army communications command -----	3-12e (9)	3-12
TACS	theater army communication system -----	3-12f (4)	3-13
TAF	tactical air force -----	7-3c	7-1
TASCOM	theater army support command -----	3-4b (1)	3-1
TCAC*	theater civil affairs command -----	3-12e (6)	3-12
TCLSC	theater COMSEC logistic support center -----	3-13b (1)	3-13
TCMD	transportation control and movement document -----	12-9c (1) (c)	12-5
TDA	tables of distribution and allowances -----	4-10	4-8
TDY	temporary duty -----	15-3b	15-1
TI	technical inspection -----	12-5b	12-1
TOC	tactical operations center -----	9-32g (2)	9-26
TOE	table(s) of organization and equipment -----	9-14a	9-8
TRANSCOM*	transportation command -----	3-12d (3)	3-11
TSG	The Surgeon General -----	17-1b	17-1
U			
UCMJ	Uniform Code of Military Justice -----	18-3a	18-1
USAMC	United States Army Materiel Command -----	4-1c	4-1
USASA	United States Army Security Agency -----	3-12e (11)	3-12
UW	unconventional warfare -----	8-5a	8-2
W			
WWMCCS	worldwide military command and control system -----	3-12f (4)	3-13
Z			
ZI	zone of interior -----	17-9	17-3

* Abbreviation not contained in AR 310-50.



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